The: Lost Planet

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London BURKE

First published, September 1919

Burke Publishing Co., Ltd., 55 Britton Street, London, E.C.1. Printed in England by .C. Tinling & Co. Ltd., Liverpool, London & Prescot

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"The crossing of space—even the mere belief in its possibility—may do much to reduce the tension of our age by turning men's minds outwards and away from their tribal conflicts... One wonders how even the most stubborn of nationalisms will survive when men have seen the Earth as a pale crescent dwindling against the stars."

> A. C. CLARKE, B.Sc., F.R.A.S., Interplanetary Flight

$MYSTERY \ A\dot{T} INVERARD$

THEY SAY that Highlanders often have a premonition of terrifying things to come. I consider myself a real Highlander, even though my birthplace was Australia; but that summer afternoon, as I took the Oban train at Buchanan Street Station in Glasgow, I had no inkling at all of what was going to happen in the next few weeks.

My name is Jercmy Grant. At the time I was just sixteen, which—according to the psychologists—is a sensitive age. That may well be, for as the train chugged slowly through the Scottish mountains, with the sea-lochs lying in grey shadow far below the track, I couldn't help feeling miserable when I remembered the warmth and colour and liveliness of Sydney.

At first I had a compartment to myself. At Dalmally in Argyll, however, an old chap came in, wearing Harris tweed plus-fours and a deerstalker hat decorated with fishing-hooks and flies. He didn't say anything for a long time; but, as he filled his pipe and lit it, I could see he was curious about me. Quite suddenly, with a friendly smile quirking the points of his white moustache, he remarked that it was grand weather for July.

Soon we began to talk about the deer and the young

grouse—or at least he did most of the talking, and I made comments in appropriate places.

In the end, trying to sound casual, he said: "And yourself now? You'll be on holiday from school, very likely?"

I told him that, in fact, I was from Australia and had never been in Scotland before.

"Australia, is it!" He leaned back, nodding his grey head as if he had found the solution to a puzzle. "I was wondering what was wrong. You'll be feeling kind of homesick?"

"I suppose so," I said, and went on to explain, in a reasonably steady voice, how my father and mother had both been killed in a railway accident the previous May.

In some ways it was a relief to talk about it. One sunny afternoon I had been at school, not worrying much about anything except a French examination. That same hight I was alone in the world and being informed by a lawyer that my father, a consulting engineer, who had emigrated from Scotland some years before I was born, had been unfortunate in his choice of stocks and shares and had left no money at all.

School, it seemed, was now out of the question. I had been prepared to take on a job—preferably something to do with Science, because that was my best subject; but the sharp-faced lawyer had smiled and made a dry joke about the cost of living.

As the train climbed higher into the purple hills, the old chap with the tweeds took his pipe from his mouth and patted my knee.

"A bad business!" he said. "I ken how expensive it is in Australia. I was there myself for a while, before coming home here to be gamekeeper in Inverard."

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I pulled myself together. "Did you say Inverard?" I asked in surprise.

"Yes. Ten miles out of Oban."

'That's funny. I'm on my way to Inverard now," I said. "My uncle lives there—my mother's brother. The lawyer wrote to him, and he sent out money and a cable to say I was to come home at once and he'd look after me. I didn't like the idea at all, and neither did he by the sound of his cable. But he's my only relative, and I expect he thought it was his duty."

The gamekeeper shook his head. "Och, now, you shouldn't be speaking like that. It's difficult to sound friendly in a cable." Then he added: "Would I be knowing your uncle, do you think?"

" Perhaps. I believe he's a scientist."

To my surprise his stout face grew suddenly intent. "A scientist!" he said. "Not Dr. Lachlan McKinnon?"

"Yes—that's his name. I say, what's the matter?"
He was fumbling with the tobacco in his pipe.
"Nothing. Nothing at all," he answered, without looking up.

But I knew there was something, and after a while he admitted that my uncle wasn't altogether a popular figure in Inverard. "The fact is," he said, "we're kind of old-fashioned in the Highlands, and when Dr. McKinnon put a big electric fence all round his estate and threatened us with the police if ever we came near him—well, it put us against him a wee bit."

. "Perhaps he's doing secret experiments," I suggested.

He nodded. "That's what I've often thought my-self."

But I was still curious. "Is there anything else you haven't told me?"

He didn't answer at once. He lit his pipe again, crossed his knees and looked out of the window. Then he turned and said: "Your uncle has a queer crowd of foreigners with him at the Big House. Sometimes at night we'll be hearing a strange sound, like the wail of a banshee. But och," he added, "very likely there's an explanation for that as well."

The compartment felt suddenly cold. Throughout the journey from Sydney I had kept telling myself that in spite of the abruptness of his cable my uncle would probably turn out to be friendly and pleasant. Now it looked as if my original fears had been fully justified.

"But there's one thing," continued the gamekeeper, more briskly, "Dr. McKinnon has an awful nice young lassie for his secretary. Janet Campbell her name is I was talking to her in the village just the day before yesterday. And now that I mind, I expect she'll be at the station to meet you with the jeep. It's aye Janet that meets visitors for the Big House."

I tried to get rid of my foreboding. "That's a relief, anyway. I was wondering if I'd have to take a taxi."

The whistle of the train welled up as the track entered a narrow defile. "Glencruitten Cutting," remarked my companion, taking a big silver watch from his pocket. "We'll be in Oban about half-past nine."

"That means I'll get to Inverard before dark?"

"Oh, yes-quite easy. If Janet is waiting for you."

She was waiting, as it happened, leaning against the bonnet of an open jeep, with the evening sun shining on her dark hair and blue linen frock.

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"How on earth did you know my name?" she asked, as I introduced myself.

"I was talking to a friend of yours in the train. The gamekeeper at Inverard. He said you always meet people with a jeep."

I put my case in the back and we climbed in.

"Lucky you spoke to me," she said, maneuvring quickly out of the station, "because I don't think I'd have spotted you at all. Your uncle told me to look out for a small boy. Instead, you're nearly a head taller than I am—and twice as broad!"

Trying to sound light-hearted, I replied that there was plenty of room to grow in Australia.

She smiled. "That's not an oblique criticism of Wilhelmina, by any chance? She's a bit cramped, I know—but she can move."

The white and perfumed hawthorn hedges were certainly spinning past us at considerable speed.

• "When did you learn to drive?" I asked.

"This summer. Spike Stranahan taught me. But of course you don't know a thing about Spike, do you?"

Ruefully I said: "I don't seem to know much about anything."

Her mood changed. "Poor old Jeremy! Dr. McKinnon told me about your parents. I know how you're feeling—pretty fed-up and trying to make the best of it. Am I right?"

I agreed; but she was so warm and friendly that actually I was beginning to feel a lot more confident.

•" I'd better tell you about the people at Inverard," she went on, as the jeep left the hedges behind and began to climb towards a heathery plateau. "First of all there's your uncle—and his partner, Professor Lars Bergman. Professor Bergman is a Swede, about

the same age as Dr. McKinnon. Nice and friendly when he decides to talk, which isn't often! Then there's Spike Stranahan." Her voice deepened to an American drawl. "You know—'I guess I can hustle faster than anyone else in this old dump!"

I grinned.

"He's only twenty-eight," she told me, "but he's got about fifty workmen under him, living in tents inside the electric fence, and they're all dead scared of him. Sometimes," she added, with a little sigh, "sometimes I wonder if he ever thinks about anything but his job."

"What is his job?" I asked.

She shook her head. "Wait a minute, Jeremy. I've not finished. Spike has an assistant—Kurt Oppenheim by name. He's only a few years older than I am, but—well, I'll leave you to form your own opinion. Finally there's Madge Smith—sharp as a needle, like all Cockneys. She's the housekeeper—and rules everybody with a rod of iron. But I'm terribly fond of her, really."

"Where do you come in?"

She changed down and set the jeep roaring at a steep section of the road which looped up among heather-screened rocks. "Didn't old Donald tell you?"

"Just that you're my uncle's secretary."

"That's right. I took on the job during the summer, mainly to earn some money. I'm at Glasgow University, studying Science."

I could scarcely believe it and said so.

She laughed. "I know! I bet you thought all girls who studied Science wore specs and looked like scareerows. Well, let me tell you, young Jeremy, I'm

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very good at Science, even though I do have nylons and a perm!"

"That's not what I meant," I replied, feeling slightly embarrassed. "It's just that—well, you don't look old enough to be a scientist."

She bowed elegantly over the wheel. "Thank you, kind sir! But I'll soon be nineteen, otherwise I shouldn't be allowed to drive this jeep. And, well "—she shrugged—" sometimes I feel my age!"

The jeep topped a rise, and the road began to dip down across the moorland towards a valley. Half-amile ahead I saw a pillared gateway and behind it a number of grey tents clustered together. The sun was going down behind us; and at that moment its light caught the strands of a high fence which stretched away on either side of the pillars. For a few seconds the wires flashed and shone like some fantastic neon sign.

It was then that my fears came back. "Janet," I said, "what's it all about? The electric fence, the lifty workmen, my uncle and Professor Bergman and Spike Stranahan, all hiding in Inverard."

Her lightsome mood had passed, and for the first time I noticed an anxious expression in her eyes. "Sorry, Jeremy, I can't tell you—not yet. I'd better warn you, though. This isn't an ordinary house you're coming to. You're homesick and tired; but nobody is going to worry much about that, except perhaps Madge Smith. You've got to have courage, Jeremy. You'll need it."

The jeep drew up outside the gateway. A short, stocky man in a blue uniform swung back the iron gates and let us in.

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We entered the grounds of Inverard, passing a group of men smoking and chatting outside the tents. A smooth track led down towards a belt of firs in the valley.

As Janet drove on, the turrets of Inverard House began to rise above the trees, squat and solid in the twilight. Then, for a fleeting instant, I saw something else which made me jerk upright and grip my seat. Beyond the house it was, soaring high out of the glen—a mass of spidery steel girders with what looked like an enormous red cylinder inside. Next moment the road turned left among the trees and I lost sight of it.

The thing left a vivid, unpleasant impression on my mind, like a nightmare. I glanced at Janet; but though I could feel she had sensed my uneasy curiosity, she made no effort to enlighten me. She kept looking straight ahead; and though the evening was quiet and warm, I shivered.

The house itself was of ancient grey stone; and, indeed, as Janet opened the front door and ushered me into a panelled hall lit by shaded electric candles, she told me it was at any rate three hundred years old. According to one story, she said, Prince Charlie had gone to ground in the cellars after Culloden.

As I put down my case and hung my overcoat on a wooden stand, there was a movement to our left. A

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quiet, rather guttural voice said: "Good evening, Janet."

We swung round to discover beside us a tall, swarthy-faced young man with a crew cut. He had apparently emerged from a half-open door near the brick fireplace.

- "Mr. Oppenheim!" Janet's voice was slightly over-pitched. "You startled me, coming out of the shadows like that."
- "I didn't see you either," he returned, and added: "Who is your young friend?"
- "This is Jeremy Grant. Dr. McKinnon's nephew from Australia. He's just arrived."

I shook hands. Kurt Oppenheim's fingers were limp and cold, but his eyes shone with a bright flame of purpose.

"Dr. McKinnon told me you were coming," he said. "I hope you will be happy here." There was an awkward pause. Then he tapped the sheaf of papers in his left hand. "Now, if you will excuse me—I am on my way to the testing-shed."

Janet had recovered. "More overtime?" she asked.

- "I am afraid so. Otherwise Hermanoff may steal a march on us." He went towards the front door and smiled, showing even white teeth. "Good night, Jeremy." His voice was low and sounded oddly sinister in my ears. "Good night—and sleep well."
- "Is he an American?" I asked, when he had gone. Janet took my arm and began to lead me across the hall to the half-open door. "He says he is. And Spike admires his work. But—ugh, he gives me the creeps. Come on now, we'll see your uncle first before I take you upstairs."

As we approached the room, which I discovered

afterwards to be my uncle's study, a voice could be heard, angry and distinct.

. "And if it comes to that, the men won't stand for it much longer. I guess you pay us well, but--"

"Mr. Stranahan," interrupted another voice, plainly Scottish, "you'll do as I tell you. It's night and day from now on. Hermanoff is determined to forestall us."

"Sure, Doctor—I know that. But we're weeks ahead of him."

"We ought to be weeks ahead of him. But Hermanoff may have someone here—a spy, a saboteur. The way you argue, Mr. Stranahan, it might be you!"

We heard an exclamation and finally a placating voice, deep and foreign. "Gentlemens—gentlemens! Come now—come. . . ."

For a second Janet hesitated outside the door. Then she took me straight in. "Excuse us," she said to the three men standing around the desk.

I placed them at once. Spike Stranahan, broad and fair, with icy blue eyes and a fighter's chin. Professor Lars Bergman, stout, bald and ruddy-faced, wearing a black suit as quiet as his own personality. And finally my uncle—Dr. Lachlan McKinnon—tall, lean and angular, with an untidy mop of greysprinkled red hair: a younger edition, I thought, of Abrahan Lincoln.

He jerked round as Janet spoke. "What's this?" he exclaimed, irritably. "How often have I told you not to interrupt a conference!"

"It's your nephew," she returned, with some courage. "I thought you'd want to see him as soon as he arrived."

He caught sight of me. "You mean Jeremy. This

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boy—" He spoke absent-mindedly, frowning behind steel-rimmed spectacles. Then he came across and shook my hand without enthusiasm. "Yes, yes," he said. "How are you?"

"Quite well, Uncle Lachlan."

"Good, good." He fingered his square chin. "Trouble is, we're busy at present. Take him to Madge, Janet. She'll look after him."

Trying hard to hide a feeling of disappointment, I was about to turn away when he caught my elbow in a firm, hard grip.

"Just a moment. This is Mr. Stranahan," he said. "And Professor Bergman."

Spike nodded in a perfunctory way; but the Swede smiled and said: "How do you do, Jeremy? You have had the long journey, yes?"

"I came from London to-day."

"You will be tired, then. And hungry." He chuckled. "All boys are hungry—for ever and ever."

But my uncle was getting impatient again. "Yeser—take him to Madge, Janet," he put in. "Tell her to give him a good supper."

"May I explain to him about—"

"Yes, yes. Explain whatever you like." He waved lean, impatient hands. "Now, please go. We are busy."

As we left the study, their talk began again.

"As I was saying, Mr. Stranahan, from now on we must work night and day. The motor is finished and ought to be tuned in by to-morrow. Then there's the jet-propulsion unit—"

Before I could hear any more Janet had shut the door behind us.

She took me to my bedroom, then said she'd have

to go and do some neglected typing. "Madge will let you know when supper's ready," she told me. "The dining-room's next door to the study."

I had a wash, doing my best not to think about anything. But as I combed my hair and looked in the mirror and saw a tall, red-headed, rather pale-faced chap with freckles, I thought to myself: "Janet was right. No one here cares tuppence about you. But there's no good getting morbid on that account. You're alone in the world—nothing can change that now—and whatever happens you've got to face up to it."

A gong sounded downstairs, and I took it to be a summons to the dining-room. When I went in, only one place was set. It appeared, therefore, as if all the others had taken their supper earlier in the evening. This was not surprising, for when I glanced at my wrist-watch I found it was nearly half-past ten.

The bare, dark walls were dull even in the electric light. Heavy red curtains moved slightly in a draught from an open window. The polished table was spread at one end with a small white cloth and a few pieces of cutlery. As I stood there, looking round me, a brisk, elderly woman came in, not much more than five feet in height: Her grey hair was pulled back into a bun, and she had a thin, bright face like a bird's. Without fuss she introduced herself as Madge Smith, the housekeeper. Her smile was warm and kind, but without any embarrassing sentiment, and I felt I was going to like her.

When I had finished some cold meat and salad and was busy enjoying a plate of apple-tart and cream, she brought in a coffee-pot and sat down at the other side of the table.

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"It's a shame," she said, abruptly. "Janet told me you didn't get much of a welcome from your uncle."

A He was busy, Miss Smith."

She smiled. "That's right—stand up for 'im. You men are all alike. Never let each other down. But look 'ere, not so much of the 'Miss Smith'. Call me Madge—even though I am old enough to be your grandma."

I couldn't help being amused at the way she spoke. Janet had said she was a Cockney, but her accent wasn't unlike what I had often heard in Sydney.

"How long have you been with my uncle?" I asked, swallowing the last spoonful of apple-tart.

"Five years, near about. Answered an advert in the paper I did."

"And do you like it here?"

She gave me a sharp look. "I see what you mean," she returned. "But as far as I'm concerned there's compensations. You'll see. Meantime, never you mind what goes on. When Janet finishes 'er typing she'll come back 'ere and tell you all about everything."

"To-night?"

"Yes. She said you was to wait for 'er. Now, 'ave some coffee, son. I'll go and fix your bedroom."

She went out, and I was left alone in the big dining-room. I drank my coffee and wondered when Janet would come and what strange story she had to tell. The spidery erection I had seen in the glen, my uncle's reference to a jet-propulsion unit, the tense atmosphere of mystery hanging over Inverard—what did they mean? Was Uncle Lachlan engaged on some important job for the British Government?

It was very quiet. When I stirred my cup it sounded sharply out of place. Through a gap in the curtains I

could see nothing but velvet blackness outside. In the wainscotting a mouse moved and scuttled.

· As the silence became even more sinister and oppressive, the pleasant after-supper feeling began to desert me. I felt in my bones that something was going to happen. It was the sensation you get just before a thunderstorm—tense and electric.

And then it did happen. Then I heard it, somewhere outside: the sound the old gamekeeper had said was like the wail of a banshee. A long-drawn, piercing wail, rising and rising to a shriek of horrible intensity.

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I SAT THERE rigid, too scared to move. The sound went on and on, whining and wailing like a soul in mortal agony. Then the door opened, and I almost jumped out of my skin.

But it was only Janet.

"What on earth's that noise?" I blurted out.

She sat beside me at the table. "I thought you'd be wondering and came at once. They're testing a motor down in the shed."

- "Gee-some motor!"
- "It should be," she answered. "It's atomic."
 - "What!"

"Atomic, Jeremy." As she spoke the wailing sound began to drop in pitch and presently died away altogether. "They'll be trying it again later," she added, with comforting calm.

She poured out some coffee for herself, and with a slightly shaky hand I refilled my own cup. Then she said: "Your uncle has given his permission, so I'd better explain what's going on."

I told her I could believe anything after the sound I'd heard.

'She nodded. "The first thing you aught to know is that your uncle and Professor Bergman, with Spike Stranahan as their chief engineer, have designed and constructed the first atomic motor."

"The first ever?" I asked, vainly searching my mind for facts I had learnt at school.

"No. But the first which is really practicable," she said. "Up till now the difficulty has been to make the particles of the split atom all travel in the same direction—without the use of a screening pile several tons in weight. Your uncle and Professor Bergman went into partnership, pooled all their money and discovered how to do it. The result is what you heard just now. . . . And by the way," she added, "the atomic motor is only a part of the scheme."

The house and the dark policies outside were again silent; and something in Janet's voice put a shiver of excitement down my back. "Only a part? What do you mean?" I asked.

"Look," she said, taking a sip of coffee, "do you know anything about astronomy?"

"Not much—except that the sun is just a mediumsized star, with the planets revolving round it."

She leaned forward. "That'll do as a beginning. The planet nearest the sun is Mercury. Then comes Venus, the Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto—all getting farther and farther away in a regular mathematical system. Between Mars and Jupiter there's a blank; but astronomers think there was a big planet in that position, which got broken up in some terrific catastrophe."

Trying to sound intelligent, I told her I'd read about that. The pieces were knocked out of the ordinary plane of the other planets and circle quite near the Earth at times."

"Good for you, young Jeremy!" She raised an approving finger. Presently she continued: "I'm not a Greek scholar myself, but apparently one of

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those minor planets was mentioned by Plato. It swung close to the Earth about ten thousand years ago, and as the world was very quiet and well behaved at that time—no wars or anything—Plato called it Hesikos, the Peaceful Planet."

"Pity it wouldn't come back!" I said.

"But that's the point, Jeremy." Her eyes grew serious and intent. "It has come back. Pythagoras—you know, the old Greek who thought up that awful theorem—Pythagoras forecast that Hesikos would reappear in the second half of the twentieth century. And sure enough it has. With the exception of the Moon, it's now the nearest object in space—about three hundred thousand miles away."

I was puzzled. "But what's all this got to do with an atomic motor?"

"Quite a lot," she said. "That motor is for a spaceship. Your uncle and the rest of us are going to Hesikos—in ten days from now."

I sat back and stared at her. "I—I don't believe it!" I stammered, at last.

She shrugged her shoulders. "You've got to believe it, I'm afraid. Remember that scientists have been studying the idea of interplanetary flight for years. It just happens that your uncle and Professor Bergman are the first to make it a practical proposition."

"But look here, Janet-"

"Listen," she said. "Professor Bergman is an expert with the spectroscope. That's a telescope and prism combined, which analyses the light coming from any star or planet. He's calculated that Hesikos has an atmosphere much the same as the Earth's, with oxygen, nitrogen, carbon dioxide and all the rest of it."

"You mean, human beings could live there?"

"Yes. And not only that. There's a new kind of metal on Hesikos—Dr. McKinnon calls it iridonium. Mixed with lead by a catalytic process, it could produce another metal indistinguishable from gold."

Information was coming with such speed that I could scarcely take it in. Besides, Janet was so young and pretty that it seemed impossible she could fully understand all the scientific terms she had been using. I made a feeble attempt to sound logical.

"But I say, if Uncle Lachlan and Professor Bergman have discovered all this why are they keeping it a secret?"

She pushed away her coffee-cup. "It's not all a secret. What is supposed to be a secret is the motor."

All at once I felt I was beginning to understand. I was even beginning to believe. "So that accounts for the electric fence?" I said.

"Yes. And all the queer 'goings-on,' as the villagers call them. You see, another scientist is building a spaceship, too—in Europe somewhere. A man called Hermanoff. And your uncle and Professor Bergman are afraid he may beat them in a race to Hesikos."

I asked her if Hermanoff had an atomic motor.

"That's just what we don't know," she replied.
"Though almost certainly he has. Atomic power is the only economical means of lifting a spaceship out of the Earth's atmosphere and field of gravity. What we're beginning to think is that all along he's had someone here, picking our brains."

" A spy?"

"Exactly—and we've got to find out who it is within the next ten days. If we don't, he may try to sabotage our ship."

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I saw now why Uncle Lachlan hadn't been very interested in me, and was about to say so, when that eldritch motor started up again. Waves of piercing sound beat into my head until I wanted to get up and run away.

Janet must have seen how it affected me, because when the wail died down, as it did after about thirty seconds, she said: "Isn't it time you were in bed, Jeremy? You must be awfully tired."

- "I am a bit. But if this goes on all night-"
- "It won't. Spike said they'd only run the motor twice."
 - "Right-oh. In that case I think I will turn in."

We said good night, and I went upstairs to bed; but the sound lingered in my mind and it was two o'clock in the morning before I fell asleep.

During the next few days, however, I heard it a score of times and gradually got used to it. As-a matter of fact, my whole outlook underwent a change. In spite of Uncle Lachlan's indifference, in spite of the constant arguing that went on between him and Spike and the consequent mood of irritable uneasiness prevailing at Inverard, I began to lose some of my homesickness and to take an intelligent interest in what was going on. That wasn't surprising, because after the rather numbing effect of Janet's original explanation had worn off, it was plainly brought home to me that the idea of a journey to another world was no fantastic dream but a matter of cold, scientific fact. Janet had also given me a specific job—to look out for anything unusual, anything which might reveal the identity of a spy.

I stood around—watching, listening, absorbing the atmosphere. There was the long, corrugated-iron shed

behind the house, with its rows of benches and turning tools and shining lathes and a concrete table in the centre which supported the atomic motor. There was Uncle Lachlan's study, where he and Professor Bergman pored over piles of blueprints and technical calculations and Janet typed furiously in a corner. There was the spaceship itself and the high scaffolding in which men scrambled like monkeys.

And as I studied the preparations—preparations for the most extraordinary adventure ever known—I came to understand Uncle Lachlan's point of view.

One morning, before the summer dew was off the grass, I went to see the spaceship. In the glen there was birdsong and the quiet ripple of the burn; but on the high knoll beyond the firs, where the huge metal cylinder pointed a blunt nose to the sky, there was constant hammering among the trellis-work of steel.

I saw my uncle standing by himself, looking up at the ship. For once he seemed to be quiet and thoughtful, and when I went across he spoke to me.

"Ah, there you are. Good morning, Jeremy."

"Good morning, Uncle Lachlan. Is there still a lot to do?"

He fingered his craggy jaw. "The motor and the jets will be fitted by to-morrow. Four days later we ought to be ready."

"That's earlier than you thought, isn't it?"

"Yes. Stranahan is first-class—when he forgets to argue." He hesitated, glancing at me with furrowed brows. Then, as if deciding to take me into his confidence, he went on: "But I am uneasy. If Hermanoff has a spy among the workmen, there may be a last-minute attempt at sabotage."

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" Are you suspicious of anyone?"

"No." He frowned. "There's nothing to go by, except that one morning about a week ago I found some papers in the wrong order in my study. Blueprints dealing with the air-pressure equipment. Either Janet or I may have been responsible—quite unconsciously, of course—but I don't think so."

It was as if he were talking to himself. He was looking away from me now, with hard worry in his deep-set eyes. I had a quick desire to get nearer to him, to make him confide his inner thoughts and anxieties.

"Uncle Lachlan," I said, "why are you so keen to make this journey?"

He emerged from his abstracted mood with a jerk. "Oh, you wouldn't understand," he rapped out, impatiently. "Not at your age."

He was about to go, muttering about some work he had to do on the problem of the escape velocity, when I interrupted him. "I might understand," I said.

He glared at me.

"I might understand," I repeated. "I'm not such a child as you seem to think."

For a moment he studied my face, rasping the back of his hand against his chin. Then quite suddenly he smiled and seemed to shed the prickly outer skin of his character. "You're like your mother," he said. "Always curious. And come to think of it," he went on, "maybe that's your answer. Curicsity."

He straightened up, and the expression on his face became withdrawn as if he were seeing a vision—a vision that was driving him on like a sharp spur.

"Listen, my boy," he exclaimed, "have you ever thought of it? The Earth has now been fully explored.

Every age but ours had its North-West Passage, its Golden Road to Samarkand—to lure adventurers into the unknown. A hundred years ago man could still dream of what might be discovered at the North Pole or in the jungles of the Amazon. Now all that is past, and the Road to Samarkand is busier than the road to Inverard. But man, if he is to develop at all, must continue to find an outlet to adventure. New frontiers are a necessity, Jeremy—and these new frontiers are for us the planets and the stars."

He paused, and the distant light in his eyes suddenly kindfied and blazed as he put a hard hand on my shoulder. "All my life, like Christopher Columbus, I have dreamed of discovering another world. Now the opportunity is within my grasp—and I cannot bear to think that anyone else might forestall me. Especially Hermanoff."

He broke off and removed his hand from my shoulder. The anxious, determined expression returned to his face.

Quickly, almost involuntarily I said: "I know how you feel, Uncle Lachlan. I'd like to go with you."

But he had become gruff and apparently indifferent again. "I'm sorry," he said, "that is impossible. And now that I have answered your questions, I must go."

At that moment I saw Professor Bergman climbing quickly down the steel ladder from the main hatch of the spaceship. He ran towards us, across the grass, his black jacket flapping open.

"Dr. McKinnon," he called out, "you must come at once. Mr. Oppenheim and I were checking the airpressure equipment. The circuit has been reversed."

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My uncle stiffened. "You mean the wires were tampered with?"

Panting a little, the Professor shook his head. "I do not know. You must come and judge for yourself."

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FOLLOWED Professor Bergman and my uncle up the long ladder.

Inside, hanging from the curved bulkhead of the main compartment, two naked bulbs illuminated a polished central pillar and a number of complicated instruments fixed at odd angles to the walls. The doors of three small rooms opened upwards through the "ceiling", while a shadowy mass of shafts and gears loomed up in a dark cavity at our feet. Everything seemed to be lop-sided and awkwardly placed, and it was only later that I came to understand why.

The Professor and Uncle Lachlan strode across the steel "floor". Kurt Oppenheim was working on a cylindrical piece of apparatus clamped to the bulkhead, with a tangle of wires leading down from it towards hidden batteries. He turned a flushed and anxious face to my uncle.

"I can't understand it, Doctor. The wires are crossed—here." He tapped an exposed junction with his screwdriver.

Uncle Lachlan bent closer.

"The result, in action," said Professor Bergman, would be a vacuum in the ship as soon as we rose into the stratosphere."

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"Quite," returned my uncle. After a while he straightened up and said: "Has Mr. Stranahan seen this?"

Oppenheim shook his head. "He is in the testingshed, working on the motor."

"Then tell him about it at once and do the wiring properly between you." The young engineer made a guttural sound of assent, and Uncle Lachlan went on: "It may or may not have been a genuine mistake in the first place. There's no evidence in either direction. But at any rate let us be thankful it was spotted in time. By the way," he added, "I believe you made the discovery, Mr. Oppenheim?"

"Yes. The Professor and I. The Professor noticed that a single red wire was out of place, and I knew at once what had happened."

Professor Bergman's expression was unhappy. "It must have been a mistake—surely. I cannot believe that anyone would desire to kill us."

- "That remains to be seen," replied my uncle. "All right, Mr. Oppenheim, see Mr. Stranahan now and have this repaired."
 - "Certainly, Doctor."
- "Go with him, Jeremy. Tell Janet to be ready to take dictation at twelve o'clock sharp."

As I went towards the ladder with Kurt Oppenheim I heard my uncle say: "Meanwhile, Professor, I want you to look over my calculations on the escape velocity. In my study. I think I have it right—but you can check my figures. A speed of eleven point one kilometres per second is what I'm aiming for. That is our minimum."

Later on I watched Spike and his assistant carrying out the repair; and throughout the afternoon I stayed

on in the ship. For most of the time Janet was there, too, explaining for my benefit the principle of the radar, of the light-wave radio transmitter, telescope and other instruments which were being installed and tested. But behind it all—behind the noise made by the tools of the workmen and the occasional whine of the atomic motor still being adjusted in the shed—I could feel we were struggling against time; against Hermanoff and, perhaps, his spy.

In the evening, as Janet and Spike and I sat in the dining-room after supper, an idea occurred to me.

Janet noticed I had grown quiet and said: "A penny for them, Jeremy."

"I guess the kid's still homesick," remarked Spike.
"No wonder, in this outfit!"

I told him it wasn't that. "I've been thinking about what happened this morning, when Professor Bergman and Mr. Oppenheim were showing us the crossed wires."

"They're all right now, if that's what you're worried about," he returned, quickly.

"I know. But I've just remembered it was Professor Bergman who found the wrong wire—not Mr. Oppenheim."

He became suddenly intent, and Janet put in: "I thought they found it together?"

I nodded. "That's the impression Mr. Oppenheim tried to give. But when Uncle Lachlan questioned him, he had to admit it was Professor Bergman who found it first. He covered up pretty quick, though."

The American moved restlessly. "Aw, wait a minute," he began; but Janet cut him short.

"It may be quite true, Spike. Remember the time Dr. McKinnon found his papers out of order?"

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- "Yeah."
- "The night before I couldn't sleep and went down to the library for a book. Coming back I could have sworn I heard the door of Kurt Oppenheim's room closing softly."

He frowned: "Why didn't you tell me this before?"

- "Because Oppenheim is good at his work, and you'd never have believed a word against him."
 - "I still don't," he said.

But I hadn't finished. "Mr. Stranahan," I went on, "even though it wasn't Mr. Oppenheim who changed the wires, don't you think whoever did it will try to change them again?"

"What are you getting at?" he said, quietly.

"Well, you put them right this morning. They're checked and ready. With so many other things to do you won't bother about them any more. If he reversed them again to-night you'd probably never notice." •

• He said nothing to that and appeared to be thinking. It was Janet who exclaimed: "Jeremy, you're right! And tonight's his only chance. We've got on so well that for once there's no night shift—but to-morrow it goes on again. Don't you see, Spike?"

"Yeah—maybe the kid is talking sense.... Look," he went on, "there's no point in worrying Dr. McKinnon. I reckon we can deal with this ourselves. Lie in wait tonight, inside the ship, and if anyone shows up take him in the act."

"That's it. That's splendid," returned Janet, with enthusiasm.

He grinned in my direction. "How about you, Sherlock Holmes?"

- "Gosh, yes-I'll come!"
- "Fair enough." His blue eyes again turned cold.

"Meet me at the foot of the ship's ladder about midnight—both of you. If there's a spy, he won't start anything till he thinks we're all asleep."

Just then Madge came in to clear away the table.

I spent the two hours before midnight lying on my bed, reading. The, book I had chosen was called The Challenge of the Stars, and its author was Uncle Lachlan. His scientific arguments were fairly easy to follow, and he made a journey through space sound quite natural and normal. But there was a final chapter headed "Additional Notes by Professor Lars Bergman", which, as it seemed to me, only Einstein could have understood.

Janet came for me at ten to twelve. We both wore sandshoes, and as we crept downstairs and across the pitch-dark hall, the house was completely silent.

Janet's hand was on the front door when suddenly a sound occurred. We turned and looked up towards the first-floor landing. For a moment a light flickered, as if a door had been quickly opened and shut. Then all was quiet again. I said nothing at the time, but I could have sworn the light had come from Professor Bergman's room.

We met Spike at the foot of the long steel ladder leading up into the spaceship. He gave me his torch and told me to keep it in my pocket.

- "Have you seen anyone?" I asked.
- "No. Everything's quiet. I just hope your hunch is right, kid, and someone does come."
 - "I'm sure someone will come," said Janet.

But when we climbed into the dark interior of the ship and settled down to wait, it seemed at first as if her confidence had been misplaced. Half-an-hour passed; then an hour, and still we had heard nothing

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but an owl hooting among the trees in the glen. Spike grew restless.

"Can't you be patient?" said Janet in his ear. "It's only ten past one."

"If nothing happens by half-past, I'm going home to bed," he answered. "Guess I'm too old to enjoy Cowboys and Indians!"

"It was yourself suggested it," she returned; but as she spoke a small noise came from outside. We froze into silence and listened.

And almost at once we knew that our vigil had not been in vain. Slowly, carefully, shoes scraping against the rungs, someone was mounting the steel ladder.

We crouched on the floor behind the central shaft. Opposite us, through the open hatch, we could see a segment of indigo-coloured sky, dotted here and there with stars. I can remember a faint scent, too—a scent of resin drifting up from the fir trees.

• Then for a moment the patch of night-sky was obscured by a figure which rose from the ladder and stood just inside the ship. My heart was thudding, but Spike's fingers bit into my arm. I could hear Janet's breathing, quick and short.

We watched the intruder move across the ship, diagonally to our left. His bulk was now in deep shadow; but we heard movement as he began to strip the outer cover of what we knew to be the air-pressure apparatus.

Finally there was a sharp snipping sound, and we realised he was using a wire-cutter. Spike grew tense beside me.

Then he was scrambling to his feet and shouting: "Jeremy—use that torch!"

It was ready in my hand. I switched it on and the

beam flashed across the compartment. There, kneeling against the bulkhead, a bunch of wires gripped loosely in one hand, we saw Kurt Oppenheim. Startled by Spike's voice, he had half turned to face the light; and as he looked back over his shoulder his expression was one of incredulous anger and surprise.

He dropped the wires and shuffled to his feet. His left hand dropped to his jacket pocket, and inside the cloth something round and sinister pointed in our direction.

"Spike!" breathed Janet. "He's got a gun!"

"It's a plug spanner. He's bluffing."

But the threat had made us pause; and before we could make another move he darted to one side in an attempt to reach the hatch.

I happened to be nearest him. I let go the torch and dived across the "floor", clawing for his legs. By a lucky chance I caught and held them, and he came down with a thud, just as Spike found the main switch and snapped the light on.

There was a moment of confusion, and a severe pain stabbed through my left knee. Then Spike took his assistant by the collar and yanked him to his feet.

"Caught you in the act, eh? Got anything to

say?"

I got up, dusting my flannels, and saw a vicious light in Oppenheim's eyes. "I'll kill you for this," he panted. "All of you!"

Spike shock him. "So it was you who went through the Doctor's papers and reversed the wires?"

"I admit nothing!" he snarled.

"Better come clean." Spike controlled himself by an effort. "You were spying for Hermanoff, weren't you?"

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"Prove it!" the other spat at him. "You are fools. I admit nothing."

"Nasty bit of goods!" Spike's voice was bitter. "All right, come on. We'll let the Doctor have a look at you." He broke off, suddenly. "Say, Jeremy—your trouser-leg's torn. And your knee's all cut and bleeding."

I told him it was nothing, and Janet said she'd look after me. "You go on down the ladder with Oppenheim," she said. "Jeremy and I will follow."

Uncle Lachlan and Professor Bergman were roused from their beds. They questioned Oppenheim for more than an hour, but with no greater success than Spike. And finally the spy was handed over to Jock Ferguson, the foreman engineer, who took the jeep and drove him off into Oban. There, at five o'clock in the morning, he was left at the station, with a ticket for the first train south.

• Meanwhile, the rest of us had congregated in the study to discuss the situation. I was beginning to feel pretty fagged-out, and after a while Janet must have noticed it.

"He ought to be in bed with that knee," she exclaimed, abruptly. "Jercmy, I mean. If that's about all—"

Uncle Lachlan frowned at her. "It's not all, Janet. At this stage," he added grimly, "an injured knee is not important."

"My knee's all right," I said.

She glanced at me with an odd expression, and Spike grinned. Next moment Uncle Lachlan had resumed the interrupted discussion.

"Now that Oppenheim has gone," he said, "our crew for the spaceship is one short. As originally

planned, it consisted of Professor Bergman and myself, Mr. Stranahan, Janet and Madge—and Oppenheim. The question now is, who will take Oppenheim's place?"

Professor Bergman cleared his throat. "If I may

put a suggestion. There is the foreman engineer."

"Jock Ferguson?" My uncle shook his head. "He is a married man, with a family. What is more important, I doubt if he could master all the instruments in the short time left at our disposal."

There was silence. Inside me, a flame of excitement began to burn.

"Uncle Lachlan," I said. "Janet has shown me how most of the instruments work. I could come with you."

His craggy face grew set. He stared at me.

The Professor exclaimed: "But you are too young,

my boy. If anything happened—"

"Uncle Lachlan is my only relative," I explained, with as much determination as I could muster. "And I understand his reasons for wanting to reach Hesikos. I want to go too—for the same reasons."

Again there was silence, broken at last by Spike.

"Doctor," he said, "I kind of like your nephew's spirit."

Uncle Lachlan actually smiled. He said: "I think we can agree on that, Mr. Stranahan." And added: "Thank you, Jeremy."

"That's fixed, then?" I blurted out.

"Yes." My uncle rubbed his bristly chin with the back of his hand. "And now that our crew is again complete, I would ask you all to be ready to leave—in four days from now."

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POUR DAYS. . . . I could hardly believe it. In four days we should climb the steel ladder into the ugly red spaceship—Uncle Lachlan, Professor Bergman, Spike, Janet and Madge—and myself. The air-tight hatch would be rolled shut. Then Spike would send the atomic motor screaming into action, and as its power was transferred to a bank of six enormous jets, firing from their exhausts atomically charged droplets of water, we should roar up into the stratosphere, into the vast emptiness of space on our journey to Hesikos.

I wanted to ask my uncle a thousand questions, but at times I was afraid to ask. The idea of discovering a new world was driving him on, and he seemed to have become more of a machine than a human being. Doing their best to avoid an open quarrel, Janet, Madge and Professor Bergman never answered him back. Spike, however, had no such qualms; and scarcely an hour passed in which he didn't growl and argue with his boss. For my part, I still felt rather out of things. At first I had imagined that Janet and I would become special friends, but it soon became evident that she was far more interested in Spike; and though this didn't actually make me jealous, I would have felt better had Uncle Lachlan treated me more as a friend and less as a brainless and

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inconvenient child. All the same I was resolved not to let him bully me too much.

The day after our encounter with Oppenheim, he sent me for some documents. When I returned to the study he was in a flaming temper.

- "Where have you been, boy? I told you to get these papers from Professor Bergman—at once!" He thumped his hand hard on the desk.
- "I'm sorry," I said. "The Professor was working inside the ship. I couldn't find him at first."
- "That's no excuse. How often must I remind you that we cannot afford to waste even a second?"
- "But Oppenheim has gone. Hermanoff hasn't a chance—"

He glared at me. "That is a false assumption. Hermanoff will stop at nothing. Now," he added, "I want Janet to copy these papers. Go and tell her."

- I shifted my feet. "She's asleep, Uncle Lachlan."
- "Asleep!" He leaned forward, tense with astonishment. "At four o'clock in the afternoon?"
 - "She was up most of last night," I reminded him.
 - "Well-what of it? So were we all."
- "Can't—can't the papers wait?" I ventured, though by this time my courage was beginning to ebb.

For a moment he looked at mc. Then he took off his spectacles and said quietly: "Are you trying to argue?"

- "No. But Janet's awfully tired." Taking a deep breath I continued: "She just can't go on all the time.".
- "I see." His voice was quieter now. "You think I've been working her too hard?"

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- "Yes. I think so."
- "Most considerate," he remarked. Then his voice rose and he pointed his spectacles at me. "But let me tell you this, boy. Where Science is concerned the individual doesn't count. Science is more important than sentiment. That's what you've got to understand—you and Stranahan and all the rest of them. No great feat of Science was ever accomplished without sacrifice. What does bodily discomfort matter compared with the discovery of an unknown planet?"

Quite suddenly he broke off and put on his spectacles again. In a normal voice he said: "Now, go and wake Janet. Tell her to come at once. When you've done that, see Professor Bergman. He's working on the rotatory jets. Ask him to bring the blueprints and discuss them with me at six o'clock, along with Mr. Stranahan."

"Very well, Uncle Lachlan. But "—I chanced it—
what are those rotatory jets for?"

He jerked upright in his chair. "What are they for?" he shot at me. "Haven't you grasped it yet?"
"No—er—"

"Well, ask Professor Bergman. I've no time to explain." He waved his hands and shouted: "Don't stand there, gaping! See Janet and the Professor as I told you. And don't loiter on the way!".

I went up to Janet's room and wakened her. Then, trying not to feel hurt, I went down to the ship and saw Professor Bergman. When I had delivered my uncle's message I inquired about the two rotatory jets. These were fixed outside the hull, at opposite sides.

"They're so small," I said, "and quite different from the driving jets."

His stout, homely face broke into a smile. "I will put it simply, Jeremy. As we journey into space, the gravitational pull of the Earth will become imperceptible. If something were not done we should all float about inside the ship, quite helpless. But if we set the ship spikning about this central shaft—by means of low power rotatory jets—it will create artificial gravitation."

I understood what he meant. "So that's why the ship is kind of round and squat—not like a torpedo at all?",

"Yes. The spin will be controlled, of course, so that our weight is the same as on Earth. But"—he chuckled—"it will be very funny. We shall walk on the inner hull, with our heads pointing towards the central shaft:"

I remembered reading about the "Rotor" at Battersea Pleasure Gardens. When I mentioned it, the Professor nodded with vigour.

"The principle is exactly the same, though as our ship is much larger there will be no feeling of discomfort in our case. When we reach outer space what we are standing on now will become the end of the ship. It will become the 'floor' again only when we approach Hesikos. Then, in order to land, we shall use our driving-jets as air-brakes."

I could see now why all the instruments and doors inside the ship appeared to be so oddly arranged. When it began to spin about its axis, and we stood erect on the curved bulkhead, everything would then be properly in place for our convenience. . . .

As time went on at inexorable pace, and the moment of our departure came nearer, suspense began to have an effect even on my appetite. Janet pulled my leg

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about this; but I think everybody was feeling the same.

Except Madge, perhaps, who appeared to be as coof as a cucumber. In the mornings she went about her ordinary household duties; in the afternoons she supervised the loading of provisions in the ship.

One evening, two days before we were due to leave, she and Janet and I were chatting in the kitchen. I asked her if she wasn't excited.

"Excited? Me! Not likely. There's plenty of food on board. That's the main thing as far as I'm concerned."

Janet smiled. "She's not human, is she, Jeremy?"
"''Uman, did you say?" Deftly Madge moved a pot
on the old-fashioned range. "It's me that is 'uman.
There's Dr. McKinnon and Professor Bergman and
Mr. Stranahan: they think it all depends on them
whether we get to this 'ere planet or not. Wot I say
is, if Providence meant us to reach it, we will. If not—
well, why worry?"

"There's something in that," said Janet.

"Course there is. If the three of them 'ad any sense they'd stop talking their 'eads off in the study there and come and eat their supper. Look at the time—nearly eight o'clock—and me trying to keep these 'ere potatoes from boiling over for the past 'alf-hour."

I said something about our journey—about the thrilling idea of flying through space.

"Flying through space!" she retorted. "All very well for you, young Jeremy! You'll be gazing out at the Moon or Mars or wotever it is. But I'll still be slaving away at my pots and pans—in a kitchen just like this, only smaller. Madge Smith, chief cook and

bottle-washer. Ain't much to get excited about in that, is there?"

"But aren't you looking forward to seeing Hesikos?" I asked.

She became thoughtful. Then she said: "Yes, in a way. Adventure—that's my motto. But I don't expect it'll be much different from 'ere. Supper won't cook itself for one thing."

- "Madge, you're hopeless!" Janet laughed and was about to enlarge on the subject when suddenly we heard the discordant tinkle of a bell.
 - " It's the front door," I said.
- "Don't I know it!" Madge whipped off her apron.

 "Gets on my nerves, it does. Building a perishing spaceship, and they can't put in a new electric bell. Wait 'ere. I'll see who it is."

I wondered if she were really as matter-of-fact as she sounded, but before I could ask Janet what she thought, the little housekeeper was back, flourishing a telegram.

- "For 'is nibs, Janet. The gateman is waiting, in case there's an answer. Wot shall I do about it?"
- "Well, Dr. McKinnon said he wasn't to be disturbed on any account. I'd better open it." Janet got up and slit the envelope with her thumb.

As she read the contents I saw her expression change. "Of all the nerve!" she exclaimed, at last.

Madge looked anxious. "Is it bad news?"

- "I don't know." Janet shrugged. "Listen to this. 'Flying from Berlin to-morrow. Meet me Oban Station 12.27 p.m.' The sender is Hermanoff!"
 - "'Im that's building the other space ship?"
 - "Yes."
 - "Strewth!" said Madge. "Wot next?"

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"But why should Hermanoff come here?" I asked. Janet folded the telegram and put it back in its envelope. "He may have found out about Oppenheim," she replied. "But in any case I bet he's up to no good. Look," she said, "Dr. McKinnon must see this at once. Tell the gateman there won't be a reply,

Madge."

Next day it was Janet's job to meet Hermanoff in Oban with the jeep. I went along, too—to give her moral support, as she put it. We stood on the platform, watching the train come in; and almost at once we spotted him, a spare, small man with a black beard and a black Homburg hat, emerging briskly from a first-class compartment. His yellow skin was dry, but behind horn-rimmed spectacles his eyes were bright and purposeful, like Oppenheim's.

Janet went up to him and said: "Are you Mr. Hermanoff?"

He frowned. "I am Professor Hermanoff. Who are you?"

"Janet Campbell. Dr. McKinnon's secretary. This is Jeremy Grant, his nephew. We've come to take you to Inverard." I took charge of his suitcase, and she went on: "The jeep is just outside the station. Please come this way."

We walked along the platform.

"Did you say—a jeep?" he inquired, in his guttural accent. "In my country a visitor would be received with a proper car—a limousine."

"Sorry," returned Janet. "It's all the transport we have, actually."

He growled in his beard. "Ach, Dr. McKinnon is a fool! As for me, everything I need is supplied by my Government."

"Not much independence in that," remarked Janet.

As we crossed the cobbles to the jeep he looked sourly in her direction. "What do you mean—independence?"

"Perhaps," she said, "Mr. Oppenheim could tell you."

I was surprised by her uncharacteristic sharpness; and as Hermanoff seemed to be a man of brittle personality, I expected him to flare up in a rage.

During the run, however, he didn't say a word. I was certain he knew about Kurt Oppenheim and his dismissal from Inverard; but though inwardly he might be fuming at this attack by a chit of a girl, he gave no violent sign of it.

When we reached the house, Janet went to put the jeep away. I accompanied Hermanoss to the study, where Uncle Lachlan, Professor Bergman and Spike were waiting. No one took any notice of me. I stayed to see what would happen, therefore, making myself inconspicuous in a corner.

The men didn't shake hands, and I saw at once that though my uncle and Spike and Professor Bergman might bicker and snap among themselves, they were now ready to present a united front.

As soon as the stranger was seated Uncle Lachlan said to him: "Why did you come?"

Black eyebrows rose a fraction. "You are very abrupt, Dr. McKinnon."

"Aw, cut it out!" Spike's drawl was harsh and irritating. "You planted Oppenheim—we know that. What we don't know is why you had the nerve to come here yourself."

Hermanoff's eyes gleamed behind his spectacles.

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"That is insulting—a typically crude American attitude!" he exclaimed and might have proceeded farther had not Professor Bergman intervened.

* Come now, come. Please let us discuss our affairs as men of science—without bitterness and anger."

There was a pause. Then my uncle said: "Bergman is right. We have no time to waste. Tell us what you want, Hermanoff."

He made an effort to control himself. Presently he smiled, though there was no humour in his eyes. "In the circumstances I will be frank. I have come to suggest an agreement. May we not go to Hesikos—together?"

"You mean you want to come with us?" said Uncle Lachlan, as if he couldn't believe his ears.

"Yes. Or one of you could come with me. My spaceship is almost ready."

No one said anything for a time. Then Spike drawled out: "He's bluffing, Doctor. Now that Oppenheim can't help him he's in a jam."

Hermanoff remained cool. "You think so, Mr. Stranahan?"

"Yeah—sure I think so." The American's chin stuck out like a bulldog's.

"And so do I!" Uncle Lachlan took off his spectacles and pointed them at our visitor. "The fact is we are about to beat you in the race to Hesikos. To-morrow we shall be gone, and I believe you are making this suggestion in a last wild attempt to share the credit."

He replaced the spectacles on his nose, then continued: "But for the sake of argument, if we did make an agreement and you joined our party, what benefit would accrue to us?"

"Again I will be frank," said Hermanoff. "I think you have discovered—like myself—that a certain metal exists on Hesikos, which is unknown on Earth. Processed with lead, it could produce gold."

My uncle nodded. "We call it iridonium."

- "So? I have given it another name—the name of a great leader in my own country. But no matter. Am I right in believing that you have not yet found a suitable catalyst for the process?"
 - "Quite right. Have you?"
- "Yes. That is my bargaining point. It is so—so unexpected, shall I say?—you may never find it."

Spike turned to Professor Bergman. "You're the expert. Is this guy shooting a line—or not?"

- "I do not think so." The stout Swede looked unhappy. "You see, in theory the atoms of lead and iridonium, mingled together, ought to produce a metal identical with gold—but I have known for some time that a fusing or catalytic substance will be necessary."
- "That substance I have discovered, Mr. Stranahan." Hermanoff was purring like a dangerous cat. "And the proportion in which it must be used."

"So what?" said Spike, dourly.

The other smiled. "I think Dr. McKinnon understands what I have in mind."

- "Of course," replied my uncle. "If we allow you to share the glory of being the first men to reach another planet, you will allow us to share the benefits of your secret formula?"
- "Exactly. With my formula to aid us, we could bring back a load of iridonium and become the richest men the world has ever known."
 - "That may be so," returned Uncle Lachlan, in a

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canny voice. "But from our point of view the position is this. So far, Professor Bergman has failed to discover the catalyst. But he has been otherwise engaged, and it is simply a matter of time before he does."

Hermanoff's coolness deserted him a little. "That is a false assumption!" he snapped. "Only by chance did I discover it."

- "We do not work by chance," retorted my uncle.
 "We shall have the glory—and the gold as well—without your assistance."
 - "So! You will not come to terms?"
- "Terms!" Uncle Lachlan rolled the "r" as his Scots accent grew more pronounced. "You forget that we are ready to fly to Hesikos, You are not! Jeremy!" he shot at me, half turning in his chair.
 - "Yes?"
- "Take this gentleman to the dining-room. When he's had a meal, find Janet and run him back to the station."

Hermanoff got up, a red tinge on his parchment cheeks. "That is your final word?" he said.

"Yes." Uncle Lachlan rubbed his chin. "I think I am speaking for my colleagues when I say there is no more to discuss."

Nervously I went to the door and held it open. Hermanoff paused on the threshold.

"You are fools!" he burst out. "Blind fools! I have made a friendly offer. You have rejected it. Very well, you may take the consequences. Some day you will cringe at my feet, begging for mercy!"

Professor Bergman raised protesting hands. "Please—calm yourself, my dear sir. Emotion is always the enemy of science."

"The man's crackers!" murmured Spike.

By some miracle Hermanoff controlled his anger. "You think my ship is not ready?" he replied. "Let me tell you this. I will land on Hesikos close behind you. And when that happens, Dr. McKinnon, you and your friends will live to regret this day!"

$THE MOMENT \ OF TERROR$

JANET AND I were thankful when we said good-bye to Hermanoff at Oban Station, at the beginning o his journey back to Europe. Later on, however, as the final touches were put to the spaceship, we began to forget about him.

The minutes and the hours were passing. For me at least the thought of twelve o'clock on the following day—which had been fixed by Uncle Lachlan as zero hour—was beginning to shoulder out every other consideration. At times I told myself that I must be dreaming—that we couldn't possibly be going on this incredible journey to an unknown planet. Then I'd realise it was only too true, and the muscles in my arms and legs would tighten with anxiety.

That evening at seven o'clock, with the sun still high above the moorland, I climbed the ladder into the ship to study the instruments I should have to watch and record during the flight—instruments for measuring the temperature of outer space, radar-screens, telescopes, air-pressure gauges and all the rest. I was determined to be a useful member of the crew and to confound Uncle Lachlan in his implied opinion that I was a mere infant and not to be trusted with responsibility.

Outside and below, workmen were still busy welding the streamline plates which covered the junction between the hull and the bank of six main jets. They weren't making much noise; and as I stood there alone in the central compartment, copying down notes and figures, I suddenly heard a peculiar sound. It was like the dialling-tone of a telephone, though slightly lower-pitched and having a kind of "bubbling" quality.

To begin with I couldn't locate it; but after a second or two I discovered it was coming from under the hatch in the "floor"—the hatch which enclosed the atomic motor and the starter batteries.

I went behind the switch panel and looked down. All I could see in the shadowy recess was a row of batteries and a number of wires leading across to the polished shafts and gears of the motor. Then, a foot or two to the left, I caught a glimpse of a flat lead plate, which constituted an important part of my uncle's invention.

The sound was emerging from the vicinity of this plate, and I couldn't imagine what was causing it. Nevertheless, I had an instinct of danger.

As I knelt down to examine the motor more closely, Janet's voice echoed from the ladder outside. Jeremy! Are you up there, Jeremy?"

"Come here!" I called to her. "Just a minute."

She climbed into the ship, with a patter of highheeled shoes. "I've been looking for you everywhere," she said. "Supper's ready."

I glanced at her across my shoulder. "Listen to this," I said.

In that moment she stood stock still. A look of horror dulled the sparkle in her eyes. "Quick—out of here!" she exclaimed.

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"But Janet-"

She caught my arm and dragged me to my feet. "We must tell Dr. McKinnon. Quick, Jeremy!"
"All right. But—"

By now she was pulling me towards the ladder. "It's a warning signal. I forgot to tell you about it. Something's happened to the atomic unit."

I told her to go down the ladder first. "Why all the hurry?" I demanded, following on.

Her voice came up to me in a desperate monotone. "Don't you realise—the whole ship may blow up at any minute!"

She jumped the last few rungs, calling to the astonished workmen to leave the ship and make for the house as fast as they could. We sprinted down through the glen, and she went on: "It's what your uncle was afraid of—that something might go wrong with so small a screen. He fixed that warning signal, just in case. But the trials went all right, and no one expected anything now. . . ."

Uncle Lachlan, Professor Bergman and Spike were in the study, poring over some papers with Jock Ferguson. With breathless speed Janet burst in and told them.

My uncle stared. But in a split second he was in command. "Mr. Stranahan," he rapped out, "the alarm switch on my desk there!"

Spike lunged forward in his chair and pressed a button. Outside the house a clamour of bells shattered the evening quiet.

Uncle Lachlan turned to the foreman engineer. "The men know what to do, Ferguson?"

"Yes, sir."

"Then go and see that they obey instructions.

Everyone into the deep cellars below the house—at once." The sandy-haired little Scot hurried from the room. My uncle went on: "Janet—what was the pitch of the warning signal?"

"Low. Not very loud."

"Then we still have time—a few minutes, perhaps. The damage may be simple and easily repaired."

Spike shrugged his shoulders. "Well, I guess that's my job. I'll go—"

With harsh emphasis Uncle Lachlan cut in. "Stay where you are! It is my job. I am the leader of this expedition and responsible for the ship."

"But say-"

"You will go to the cellars with the others, Mr. Stranahan."

"You mean—you mean you'll try to repair it alone?"

" Yes."

Professor Bergman put a nervous hand on his arm "But Dr. McKinnon—if there is an explosion—"

"In that case there will be only one casualty. You and the others will carry on the work we have begun and rebuild the ship." His grim expression challenged further argument. "Now, I should be obliged if you would make your way to the cellars—all of you."

Spike was distressed. "Have a heart, Doctor! Let me come with you."

"No, Mr. Stranahan. You will do as I say." Uncle Lachlan's words were as quick and sharp as bullets. He touched another button and the electric bells were silent. Going towards the door he added: "Don't forget Madge, Janet. She's in the kitchen."

"Very well, Dr. McKinnon. But-"

"That is all," he silenced her. "I am going to the ship now."

THE MOMENT OF TERROR

Janet found Madge. They hurried to the cellars with Spike and Professor Bergman and the workmen, who, by this time, had been briefed and organised by Jock Ferguson. In the confusion no one noticed me.

I went out through the garden and into the glen and saw Uncle Lachlan in the distance, climbing the steel ladder alone. It suddenly came to me: "He's my uncle. I can't desert him now." Then I was running towards the ship as fast as I could go.

I found him in the main compartment, kneeling beside the hatch of the atomic motor and working desperately with an insulated spanner. The warning sound seemed to be louder now.

- "Who's there?" he jerked out.
- "It's me-Jeremy."
- "You young fool!" he shouted. "Get out of here!"

I stood my ground.

His eyes blazed at me. Then his expression changed. "All right," he snapped, "you can help me. Take that other spanner. Unscrew those nuts—down there. Understand?"

I lay beside him. Following the direction of his pointing finger, I saw a row of nuts along one edge of the lead plate.

"You do that lot," he ordered. "I'll continue on the other side. Be as quick as you can," he added, quietly.

It was awkward working in so cramped a position. My fingers and wrists seemed to develop an odd lack of power. But fairly soon, wielding the insulated spanner with increasing skill, I had removed four out of the seven nuts which were my portion.

- "Is the—is the damage bad?" I said, attacking the fifth.
- "I'm not sure. It's something we couldn't have foreseen. One of the starter batteries had a flaw. That one up there." He gestured with the thumb of his left hand. "I disconnected it at once."

"Then it wasn't Oppenheim?"

"No. Nobody's fault." He was panting a little as he pushed and tugged with his spanner. "Acid from the battery has been trickling across to the screening pile, setting up a chemical reaction. This plate we're working on is the basis of the pile. If we—if we can get it out in time and put in the spare—that's it there, lying beside you—no harm will have been done. But if we're too late—if the chemical reaction has already affected the uranium—well, I think you understand, Jeremy."

Panic welled up inside me; but I crushed it back and set about removing the sixth nut. It proved to be tighter than the rest, and for a moment I was on the verge of getting up and running for my life like a coward. Then Uncle Lachlan's voice came harshly to my ear.

"Lean hard on the spanner, boy! Never admit defeat."

I leaned hard and the nut moved.

All the time the warning sound went on and on, like a telephone-submerged in water.

"How much—how much time have we got?" I asked.

"I can't tell you. But if and when this noise rises to a higher pitch, our time can be measured only in seconds."

"Lucky you thought of putting in a warning." I scarcely knew what I was saying. My head was

THE MOMENT OF TERROR

under the level of the hatch, and at any moment I expected a blinding explosion to leap up at me out of the shadows. Uncle Lachlan must have understood my feelings.

"It's quite a simple gadget," he replied, unemotionally. "On the principle of a Geiger counter."

"But you didn't expect it would be needed?"

"No. I thought I had left nothing to chance. Then this—a cracked battery." His words grew taut. "Science is powerless against ordinary human errors."

As he spoke the warning rose to a continuous, highpitched whine. It seemed to spring up at my face, and involuntarily I cowered back. Beads of sweat ran down my forehead and into my eyes. My spanner rattled against the lead plate.

"Keep going!" exclaimed my uncle, and his voice compelled me to obey. "You've only got one more nut to remove—and my side is finished." He turned, found a pair of rubber gloves which were lying ready and put them on. "I have to pull out the plate with my hands," he explained.

I screwed off the last of the nuts. My teeth were chattering. "How—how much longer?" I said.

"I told you—a matter of seconds. Pray heaven all the rest are under cover. Keep clear, Jeremy."

I slid to one side, though my muscles almost refused to act. He pushed his shoulders into the cavity and reached down for the plate. I heard a click as it came away. Then he tossed it up and back across the steel "floor".

He took the spare and once again leaned down. For a time he seemed to fumble. Then there was another click.

He pulled himself back from the cavity. We lay at full stretch, inches apart, looking into each other's faces.

"For a few seconds now," he said, "the noise will become louder. Then it will die down, or—that will be the end."

The warning signal grew in volume. My muscles tensed. Every inch of skin on my body seemed to house the ragged end of a nerve. Uncle Lachlan's eyes stared into mine, controlling the terror that threatened to overwhelm me.

It was a moment I shall never forget. The noise bored into my eardrums with a sensation of physical pain.

Then—so suddenly that I cried out—it stopped.

Presently, limp and soaking with sweat, I whispered: "You've done it, Uncle Lachlan!"

"So it would appear." For the first time I noticed a tremor in his voice. "But your pronoun is wrong. I didn't do it. We did it, Jeremy." Then his resolution and energy came back. "Now—be quick!" he ordered. "Screw on those nuts. Then we can tell the others that—that everything is normal again."

ZERO HOUR

THROUGHOUT THE NIGHT Jock Ferguson and his workmen carried on—testing, fitting, touching up every crevice of the ship with special heat-resisting paint. But Uncle Lachlan insisted that those of us who were going on the journey should try to rest.

I don't know about the others, but at first I couldn't sleep. Thoughts and ideas crowded one another in my head. Memories of my father and mother. The story of the Covenanting Marquis of Argyle who had slept like a baby on the eve of his execution by the Royalists. Lines by Pope which I had learned at school:

In pride, in reasoning pride our error lies; All quit their sphere, and rush into the skies. Pride still is aiming at the blest abodes, Men would be angels, angels would be gods.

And finally the caption of a futuristic painting by an Australian artist: "Last Night on Earth."

Last night on Earth. . . . I lay awake and wondered. We were such puny creatures to be challenging the might of Heaven. And yet—our challenge wasn't only physical. It was spiritual as well. What had Uncle Lachlan said? "Man must continue to find an outlet to adventure. New frontiers are for us the planets and the stars." Had not Columbus, on the night before he sailed, felt exactly as I did now? And Columbus—a small, stout man pitting his

indomitable will against the unknown—had reached his goal and had returned.

I heard the clock in the hall strike two. Soon after that, however, I must have dropped off; and I wakened with the sun in the sky and the sparrows thattering outside my window. Tense anxiety returned in a rush. This is it, I thought. This is the day. And I suddenly wondered if there were any sparrows on Hesikos.

When I got down to breakfast Professor Bergman was in the dining-room alone, smoking a cigarette with his coffee. He greeted me with his usual friend-liness; but in spite of his soothing manner I could eat little of my boiled egg. I asked him how long he thought our journey would take.

"Not long," he replied. "The distance to Hesikos is three hundred thousand miles. When we reach outer space—only a matter of seconds after the take-off—the thrust of only one of our main jets will enable us to travel at about five thousand miles per hour. That means we ought to reach Hesikos in sixty hours. In other words—as to-day is Thursday—at midnight on Saturday."

"Then we'll be landing in the dark?"

"No, no. According to our calculations it should be mid-morning on Hesikos about that time. Our zero hour has been planned on this basis."

I took a bite of toast, but my mouth was dry and I found it difficult to swallow. He went on to speak about our fuel supply, which was in fact plain water, stored in tanks beneath the "floor". Most of it, he reminded me, would be used up in our first great leap from the Earth, hurtling out through the jets atomically charged, and with terrific power. By the time we

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reached our objective, the tanks would be empty.

"But there is water on Hesikos. We discovered that by spectroscopic analysis" he said. "We can refuel there for the return journey. That is the great advantage of atomically charged water as a means of power. Our storage tanks need only be half as big as those in any other spaceship previously designed."

"Do you think everything will go all right?" I asked, trying to sound cool.

He shook his head. "I cannot tell you that. But we have done our best to leave nothing to chance. As you know, we are taking with us spacesuits and supplies of oxygen, in case of a breakdown in the airpressure system. Every instrument has been tested many times. Theoretically our journey ought to be as safe as in an aeroplane from Stockholm to London. Nevertheless, only practice will show if our theories are correct." He broke off, gesturing with his hands. "But you are eating nothing, Jeremy. There is still another egg."

- "No, thanks, I'm not hungry," I said, and added: "Uncle Lachlan doesn't seem to be a bit anxious."
- "Dr. McKinnon's faith is wonderful." The Professor's eyes lit up. "I have never met a man with more confidence."
 - "What about you, sir?"
- "Well—perhaps you might call me a fatalist. For myself I am not afraid."

Janet, my uncle and Spike were in the ship, it seemed, making a final check—especially on the new starter batteries. Professor Bergman and I had just planned to finish our coffee and join them, when Madge came in.

"You two still 'ere! Remember I've to wash all

these dishes and get dressed before twelve o'clock." The Professor apologised. "But surely," he went

on, "surely on this particular day someone else could wash the dishes, after we have gone?"

"No fear." She bustled about collecting crockery an a tray. "Leave everything tidy be'ind me—that's mv motto."

I got up and helped her. She was about to go at last, carrying her load, when something occurred to her. "Professor," she said, putting her head on one side like a bird, "wot d'you think I should wear? A summer frock with a shady 'at-or my 'eavy blue suit with a tammy?"

He was plainly surprised, and for once he had no smooth answer. She continued: "If there's 'uman creatures on this 'ere 'Esikos I want to be dressed just right. Can't let the old Union Jack downspecially among the 'eathen."

The way she said it made me laugh; but at the same time I couldn't help admiring her courage.

Professor Bergman cleared his throat. "If I may suggest it, dear Madge, I think your summer frock. It will be quite warm in the spaceship, on account of the heaters. But bring a coat also. It may be chilly at nights on Hesikos."

She flashed him a grateful smile. "Thanks, Professor. That's a load off my mind."

I didn't join the others after all. Instead I gave Madge a hand to dry the dishes. Afterwards I went out into the garden. It was a morning of clear sunshine; and for a time I stood listening to the birds in the glen. Here and there, in the shade, patches of dew still lingered on the grass, like silver patterns on green velvet. Beyond the trees and behind the red

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nose of the ship the countryside rose in purple billows to a sweep of moorland, clearly etched against the sky. To-day there was no sound of hammering, and the silence was somehow strange.

Abruptly, down by the burn, a grouse flew up-crrk, crrk, crrk; and as the echoes died away L heard a lark singing. A lump came into my throat, for at that moment Inverard seemed beautiful and precious. It was half-past ten; and at half-past eleven we should all be climbing the steel ladder into the ship.

Janet came up from the glen, alone. I told her I thought she looked tired.

She nodded. "I'm just about all in. Your uncle and Spike are at their very worst this morning. And I have to bear the brunt of it."

"How do you feel-about the journey, I mean?"

"Pretty awful. If I stop to think, my tummy kind of loops the loop." I could sympathise, only too readily. "But it's no use worrying now," she went on. "We've got to put our faith in your uncle and Professor Bergman—and Spike."

Three-quarters of an hour later I came down from my room into the hall, carrying my suitcase. Uncle Lachlan was there with Jock Ferguson.

"I get you, sir," the little engineer was saying. "When you all go into the ship I stay in the blockhouse below—at the end of the intercom—until eleven-fifty-five. Then I disconnect and take cover."

"Right," said my uncle. "The main thing is to make certain there's nobody around who might be injured by the blast. And remember—the landingsite will be radio-active for some time."

"I'll remember, sir."

- "When we have gone," Uncle Lachlan continued, "you will remain at Inverard as arranged. Dismantle the scaffolding and prepare a landing-ground higher up on the moor."
 - "Very good, sir."
- "Wait here for at least two months. There are ample funds. If we—if nothing has happened by then, you may return to your homes and look for alternative employment."

Ferguson smiled. "You'll be back long before that, sir. She's a grand ship."

"I hope so, Jock. In any case my lawyer will advise you." Suddenly he turned to me, and his voice became hard and urgent. "Now then, Jeremy—find the others. We must go aboard."

I was last to climb into the ship. We stood about, trying to talk naturally while the minutes passed. Madge said something about making a cup of coffee, but her kitchen door opened into the "ceiling" and it would have been difficult for her to get in. Uncle Lachlan told her to wait until the journey started, when, as the ship took up a new position, she would find everything much more convenient.

At eleven-fifty Spike pressed a lever and the main hatch rolled shut. As daylight vanished and we were left in the yellow glow of electric bulbs, a feeling of sick depression came to me. The scent of the firs and of sunshine on damp grass gave way to an odour of cold metal and oil. I glanced at Janet. She smiled, crookedly.

There was no sound in the ship. The scrape of a shoe made an echo which seemed to dance among the instruments. Highlights winked on the central shaft.

Uncle Lachlan stood by the intercom telephone,

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near the radio. Spike, having closed the hatch, crossed to the switch panel above the atomic motor. The rest of us each chose a safety-belt, fixed high in the wall, and waited beside it.

At eleven-fifty-five Uncle Lachlan told us to fasten our belts. Then he spoke into the telephone. "Any you there, Ferguson?"

- "Yes, sir." The reply crackled loudly in the confined space.
- "The hatch is closed and we are ready. Everything under control down there?"
 - "Yes, sir. And as quiet as a church."
 - "Good. You may disconnect now."
 - "Right. Er-good-bye, sir. And all the best."
 - "Thank you. Good-bye, Ferguson."

He put down the receiver, and I wondered if Jock's would be the last voice I should ever hear on Earth.

"Belts all fastened?" inquired my uncle, buckling on his own. There was a murmur of assent.

He looked at his wrist-watch. "It is now exactly two minutes to twelve, and at this point I will explain what is going to happen." His eyes were keen and cold behind his spectacles. "When I give the order, Mr. Stranahan will start the atomic motor. In a few seconds, when it has generated sufficient power, he will switch it over to the jets. At first we shall climb at a comparatively slow rate, but when we reach the stratosphere our speed will suddenly increase to over ten miles a second. I believe this will cause us all to suffer a temporary black-out. It will do us no harm whatsoever, and when we regain consciousness we shall have escaped from the full force of the Earth's gravity, and the rotatory jets will automatically

have come into action. Do I make myself clear?"

We assured him that he did, and it became very quiet as he studied the second hand moving on his watch. I looked round at the others. Spike stood by the switches, fair hair rough and untidy, lower jaw thrust out in dour concentration. Janet was nearest him. She was pale, and the artificial light put shadows under her eyes. She wore grey slacks and a navy blue pull-over, and I noticed that as time ticked on she kept watching Spike's face. Next to us was Madge, neat and small and gaily dressed as if for a party, her mouth pursed into a determined circle. Then came Professor Bergman, patient and calm, like a St. Bernard dog. His clothes were dark and correct for business; but somehow they looked incongruous in our present surroundings.

I turned to my uncle. As I did so he raised his hand and drew a deep breath.

- "Ready, Mr. Stranahan?"
- "Yeah."
- "We have exactly ten seconds—from now."
- " Okav."

My nerves tingled. There was a suffocating pressure in my chest. I wanted to get out of this metal prison, to tear the hatch open with my bare hands, to breathe again the comforting scent of the firs. But that was impossible. This was zero hour—too late to do anything except stand and wait.

"Motor please, Mr. Stranahan!"

Spike's eyes gleamed. He touched a switch on the panel. For a second the lights grew dim. Then they flared again, and into our eardrums burst the hideous shriek of the atomic motor, rising and rising until it filled every corner with its wail of agony.

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Above it, harsh and imperious, came Uncle Lachlan's voice: "Switch to jets!"

Spike's hand moved on the panel. I tensed my muscles. Janet crouched forward, clutching the outer edge of the radar-screens. Suddenly, with a shattering din, the six jets beneath us roared into action. The ship vibrated. We began to lift and sway. I tried not to think about anything. I saw Madge's face, white as the face of a ghost. The electric bulbs flickered again and seemed to die.

Then the "floor" was thrust up under me like a giant's hand. I felt pressed down, unable to move, and the safety-belt cut cruelly into my arm-pits. My heart beat like an engine. Janet screamed, and for an instant I had the impression that we were toppling over.

But finally the roar of the jets overpowered everything, and a huge black blanket floated down.

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When I came to myself I was lying sideways, supported under the arms by the belt. A glance at my wrist-watch showed it was only a minute past twelve. In spite of my hazy condition I knew that something odd had happened; and almost at once I realised that the position of the ship had altered—as Professor Bergman had explained it would—and that it was spinning about the central shaft, giving us artificial gravitation. The only sound was a slight and continuous humming.

I sat up and found my uncle standing beside me. His face was devoid of colour, but his lean jaw remained as firm as ever.

- "Feeling better, Jeremy?"
- "Yes. What about the others?"
- "Perfectly normal. We all regained consciousness before you did."
 - "That was terrible—that take-off."

He frowned." It only sounded terrible. And the black-out lasted for less than a minute, as I had foreseen. By the way, you should unfasten your safety, belt."

Fumbling with the buckle, I looked round.

The big compartment was brightly lit, and the

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various instruments and fittings which had appeared to be so awkwardly placed when the ship was on its tail now looked quite normal and easy to use. What had previously been the "floor" had become a vertical wall, in which a square opening gave a clear view of the atomic motor, batteries and fuel tanks: Spike leaned against this wall, carefully watching his dials and switches and listening to the quiet sound which emerged from the shadows beyond them. At the other end, the three doors which had formed part of the "ceiling" were now also in a vertical position. The one on the right opened into the kitchen, which had also been designed as a bedroom for Madge and Janet. The centre one gave access to a well-fitted laboratory and workshop. The one on the left was that of a study and bedroom combined, where Professor Bergman and my uncle could sleep. (It had already been arranged that Spike and I should have our mattresses in the main compartment.)

I couldn't actually feel that the ship was spinning, but the new floor sloped up steeply on either side of me, and when I looked beyond the central shaft I saw that Janet, perched on a tubular steel chair beside the radar-screens, appeared to be upside down.

Professor Bergman and Madge weren't in evidence. The former, I presumed, had gone to the laboratory to begin work at once, while our housekeeper would be in the kitchen, inspecting her new stove and brewing up some coffee.

I got to my feet gingerly, scared I might fall.

Uncle Lachlan smiled. "It is rather odd, with people looking down at you. But you'll soon become accustomed to it. There's no feeling of discomfort when you move. Try it."

I took a tentative step. There was no apparent reaction. I tried another, which was equally successful.

"You see, there's nothing to be afraid of," Uncle Lachlan said. "To walk across the ship looks like going uphill, but as you move forward the effect is exactly like walking on the flat. Now, I must join Professor Bergman in the lab.," he went on, briskly. "Make yourself useful. Janet is already watching the radar-screens. She'll require help in making a graph."

He strode off confidently, and I was left to negotiate the curved floor by myself. On the way I had a word with Spike, who told me in his terse way that we were now using only a single propelling jet. We had escaped from the Earth's atmosphere already, it seemed, and were travelling so fast that any sound from the jet was being left far behind us. The faint humming was caused by the atomic motor, which was running at less than a tenth of its normal speed, driving only the rotatory jets and the dynamo for the lighting and instruments.

Ten paces farther on I came to where Janet was sitting at the radar-screens. She smiled as I took a chair beside her.

- "No ill effects, Jeremy?"
- "I don't think so. And moving about is far easier than it looks."
 - "' A piece of cake,' Madge says."

I studied the twin screens of the radar. The one on the left showed a clear flashing light. The other was blank and dead.

Janet had taught me how the instrument worked.

The left-hand screen was beamed on the Earth, and the flashes indicated how far away we were from it. When I took my seat beside Janet the interval

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between the flashes was about two seconds. According to the guide-table prepared by Professor Bergman, which was conveniently displayed under a glass panel, this meant that at the time we were just over two thousand miles distant from the Earth. As we got farther away the flashes would become fainter, with more time between them. For instance, at fifty thousand miles—in ten hours after the take-off—they would occur once every fifty seconds. At a hundred thousand miles—in twenty hours after the take-off—they would disappear altogether.

The right-hand screen was beamed on Hesikos. It would remain blank until we got to within a hundred thousand miles of our destination. Then we'd begin to see a tiny flash every hundred seconds or so.

But as I sat there, going over in my mind all I had learned, a thought occurred to me.

"Janet," I said, "what happens in between? I mean, the journey is supposed to take sixty hours altogether. For the first twenty hours the left-hand screen will be in action; and for the *last* twenty hours the right-hand screen will be doing its stuff. What about the twenty hours in between? What happens then? Do we see nothing?"

"It depends," she answered. "For that hundred thousand miles in the middle we shan't pick up either the Earth or Hesikos. But occasionally the screens may show the Moon or some of the small asteroids, as their orbits cut across the line of our flight."

"That's how your uncle and Professor Bergman will be able to calculate whether we're maintaining our course or not." Suddenly she leaned forward and with rather an apologetic smile pushed a sheet of

[&]quot; I see."

squared paper in front of me. "Come on, Jeremy—we'd better start. Your uncle wants us to make a graph of the flight. So get busy and jot down the readings as I give them."

- "Right-oh," I said, taking a pencil from my pocket.
- "First, the time—twelve-ten. That's your number across." I nodded and made a dot enclosed by a small circle. "And now your number down," she said. "Wait a minute. Two point one-four seconds. Right?"

"Yes. I've got that."

"Fine. I'll give you a reading every minute—for the first ten minutes at any rate. So just keep concentrating."

I remembered Spike and stuck out my jaw. "Okay," I said.

At twenty past twelve, when the interval between the flashes was 2.92 seconds, we stopped for a breather. It was our job to report any unusual changes, but the graph seemed to be developing smoothly.

The ship was quiet, except for the hum from the motor, and it was difficult to believe that we were rushing through space at five thousand miles per hour. But as soon as we relaxed and my imagination began to work I felt uneasy. I said as much to Janet.

She nodded. "I feel scared," she admitted. "It was bad enough waiting to go. But then we had hard work and excitement to keep us going. We had ordinary things all round us—the house and the wood and the sparrows. Now there's just this—this awful hemmed-in silence."

"That's it, Janet. Nobody's ever tried to leave the Earth before—and we don't exactly know what to expect."

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A few seconds later Madge came bustling towards us with a tray. She had sharp eyes.

"Now then, now then—wot's all this?" she demanded, putting the tray on the table beside us. "Long faces already?"

"We were just—thinking," I said.

She clicked her tongue. "It's a nice cup of coffee you need—that's wot. No good thinking."

Janet laughed. "I expect you're right, Madge."

"Course I'm right. It's nice and warm in 'ere, and quite comfortable—once you get used to seeing things upside down. Leave the thinking to Dr. McKinnon and the Professor. They know wot they're doing." As she began to pour out our coffee she caught sight of the radar. "'Ere," she exclaimed, "wot's all them flashes in aid of?"

Janet told her.

"Blimey, wot next?" she returned. "Dr. McKinnon and Professor Bergman are in that room over there, listening to a thing that goes buzz-buzz—like a perishing bumble-bee."

"That's a navigational instrument," chuckled Janet.

"Ah! Like two old 'ens they are, sitting on a clutch of eggs. Never even looked my way when I took in their coffee."

"I bet you told them off," I said.

"I did and all," she answered, briskly. "Now, drink up your coffee while it's 'ot. I'll take some to pore Mr. Stranahan. 'E looks kind of lonely."

As Janet and I sat there, plotting our course, I felt a mounting strain in the ship. My unde, Professor Bergman and Spike moved in and out of the main compartment, quiet and tense. Sometimes they

came and looked at our graph; but if I asked them a question—especially Uncle Lachlan and Spike—they snapped my head off. Madge was the only one who remained ordinary and human, and we all enjoyed the meal of roast beef and Yorkshire pudding which she served at six o'clock.

That night we took turns to keep watch on the radar. Janet and I had a sleep—or at any rate I tried to sleep—from midnight until seven in the morning. Then we went on duty again. Spike was watching the motor as usual, while my uncle and Professor Bergman—and Madge, too—were resting.

The signals flashing back from the Earth were now fading away; and at seven-fifty Janet gave me the final reading for the left-hand screen. The flicker was very faint, coming after an interval of 100.32 seconds. We were, it seemed, over a hundred thousand miles from the Earth and keeping to our scheduled time almost exactly.

The radar had become lifeless—and might remain so until, in another twenty hours, we picked up Hesikos on the right-hand screen. We stayed on watch, however, in case anything happened to cross our path which Uncle Lachlan would want to know about.

The atmosphere seemed to be growing warmer. But this was probably my imagination, because the ship was automatically air-conditioned. There was no apparent motion in the hull; and the fixed yellow light-bulbs cast strange shadows into every corner of the topsy-turvy compartment. My eyes were becoming tired, and once or twice I had to fight down a feeling of utter panic as I thought of what might happen if the air-pressure system suddenly failed and we had no time to put on our spacesuits.

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It would be about twenty past eight when I imagined I saw a series of flashes on the right-hand screen. I rubbed my eyes and glanced at Janet.

- "Did you notice anything?" she said, quietly.
- "Yes, I did."
- "It can't possibly be Hesikos already. Maybe an asteroid crossing our path." As she spoke the flashes appeared again, this time clear and unmistakable. "Gosh—that's plain enough!" she exclaimed. "A whole collection of signals."
 - "Like 'rain' on a piece of old film."
- "Exactly. There's more than one object there. Let's time them." She waited until the screen flickered again, then began to count. "One, two, three, four, five, six, seven seconds, Jeremy. Whatever it is, it's only seven thousand miles away."

We took three more readings and looked at each other. There could be no doubt about it. The unknown objects were coming towards us at tremendous speed.

- "Shall I tell Uncle Lachlan?"
- "You'd better. And be quick!"

My uncle and Professor Bergman were asleep in their room, but when I roused them and described what was happening they became wide awake at once. As they followed me out into the main compartment the Professor said: "Which beam? Earth or Hesikos?"

- "Hesikos," I answered.
- "That is strange," he murmured. "I expected a clear passage until ten o'clock this evening, when we ought to pick up Asteroid Gamma."

Uncle Lachlan suggested that the flashes might be caused by a filament of gaseous matter; but

when he reached the radar and actually saw them for himself he shook his head. "Definitely not gas," he decided.

"They've been going on for the past three minutes,"

Janet said. "Getting closer and brighter all the

time."

There was silence while the two men studied the screen. A premonition of disaster came to me. Watching my uncle, I saw the line of his jaw grow taut and firm.

"What d'you make of it?" he said abruptly to Professor Bergman.

The Swede appeared to hesitate. His face was grave and pale, and I felt the atmosphere in the ship become even more stifling. At last he spoke.

"I am afraid there is only one answer. A shower of meteors is approaching us—exactly in our line of flight."

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JANET SAID NOTHING, but simply stared at Professor Bergman. The flashes grew plainer on the right-hand screen. My collar felt tight. I put my hand up and loosened it.

"Meteors," said Uncle Lachlan, steadily. "Yes—you must be right, Professor."

"What size are they?" I blurted out.

Professor Bergman shrugged broad shoulders. "We cannot tell. The radar does not indicate size."

"Can't we-avoid them?" asked Janet.

Neither of the men offered a direct reply; but I knew well enough that in airless space there is no means of direct steering.

Uncle Lachlan said: "Our present line of flight will bring us directly among them, without a hope of survival. I can see only one possibility. If we increase our jet speed—temporarily—we may be able to swing clear, above the main cluster. What do you think, Bergman?"

The Professor nodded. "It is our only chance."

According to the radar, the meteors were now less than three thousand miles away; and at our present rate of approach we were liable to collide with them in about six minutes. I felt weak and helpless. But

my uncle, as was his habit, assumed firm control of the situation.

Abruptly he turned and called out: "Mr. Stranahan—come here at once!"

The American looked up from his dials, then sauntered towards us along the curve of the floor. "What's eating you, Doctor?"

"A shower of meteors is approaching us, on our line of flight. Unless we can take avoiding action there will be—an end to our adventure."

His words were harsh, uncompromising. Spike's jaw dropped, and his air of supercilious confidence dropped from him like a cloak.

Uncle Lachlan continued: "I want you to switch on the full power of the jets for the next few minutes. That may lift us above the meteors, to some extent at least."

- "But Doctor-the fuel-"
- "It will strain our reserve to the utmost. I know. We must take the risk."

Spike swallowed. "There's another thing," he began; but my uncle cut him short.

- "Please do not argue, Mr. Stranahan! As you see, the radar signals have become almost continuous."
- "Yeah. Okay." At last Spike seemed to appreciate the full gravity of the emergency. "Yeah. I'll switch on."

As he left us, I said: "Did you expect anything like this, Uncle Lachlan?"

"No." He rubbed his chin. "In outer space the chances of encountering another material object are small. We have been grievously unlucky."

At the far end of the compartment I saw Spike's hand move across the switch panel. The lights

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flickered. Then the low humming noise began to increase in volume; and in a moment, it seemed, the whole ship was filled by the scream of the atomic motor. There was nothing more to be done. We stood by the radar, motionless, waiting.

The flashes were now occurring every second, which meant that there was only a thousand miles between us and the meteors—"the vermin of the skies" as Uncle Lachlan had called them in his book.

"Would a meteor have to be pretty big to—to damage us?" I asked him, above the wail of the motor.

"Our hull is of half-inch steel," he replied. "But at the rate we are travelling a meteor the size of a marble would destroy us. We are safe only from the smallest particles."

Professor Bergman glanced at the radar, then at his watch. "Two minutes from now we should know," he said.

I wondered if Madge were still asleep. If so, there was no point in wakening her. Spike came back and stood beside us. It was apparent that he had recovered from his initial shock, for his eyes were now hot with anger.

"Dr. McKinnon," he said, "you and Professor Bergman here—you told me you'd made sure there'd be nothing in the way?"

"We took every precaution," returned my uncle.

"The time of our take-off was chosen with the greatest care."

Spike sneered. "But you weren't as clever as you thought!"

I heard Janet draw in her breath. All at once the situation had become crude and ugly.

"Mr. Stranahan"—the Professor spread his hands in distress—"a meteor shower could not possibly have been foreseen."

But Spike wasn't to be soothed so easily. Roused, perhaps, by the sting of unexpected danger, his temper was getting worse every second.

"Don't give me that!" he retorted. "While the ship was being built you kept shooting a line—anyway, Dr. McKinnon did. You've got to be accurate, you said—accurate to the millionth part of an inch. Okay—I was accurate. Why didn't you apply the same rules to yourselves?"

Janet caught his arm. Her eyes pled with him. "Oh, Spike—don't start to quarrel! Not at a time like this."

He looked at her, and the angry glint in his eyes seemed to soften.

Then, with cool precision, Uncle Lachlan said: "Let me assure you, Mr. Stranahan, this is nobody's fault. A meteor shower is completely unpredictable. And I'm inclined to agree with Janet—you have chosen a singularly inappropriate occasion to show your bad temper."

"Bad temper!" exclaimed Spike. "Listen here—" Quickly Professor Bergman interrupted. "Please—please, Mr. Stranahan! At any moment now, unless our jets have lifted us—" With a shrug he broke off there, as if loath to put the sinister possibilities into words.

For a time no one spoke. Janet held on to Spike's arm, and by degrees his anger faded. He put his free hand on top of hers. "Okay," he said, quietly. "Maybe I did speak out of turn. Sorry, Janet."

The signals were now vividly clear—a continual

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sparkle of light on the radar. In a matter of seconds our fate would be decided, one way or another. The motor screamed like someone in terrible pain. Uncle Lachlan's voice came sharply.

"I should warn you that even though we encounter only very small particles there is no air resistance, and the ship may be thrown about."

Abruptly, as he spoke, the radar went blank. Almost simultaneously something struck the outside of the hull, making a noise like a stone on corrugated iron. My body stiffened; and though nothing was said, I saw that the others had also assumed stiff and awkward attitudes, as if by doing so they might ward off disaster.

The first sound was followed by another and yet another, then by several more at shorter intervals. The ship began to tremble and sway. We held on to tables and chairs, looking at each other for comfort.

Soon the shower of particles through which we were passing grew thicker. There was a continuous ringing rattle, like hailstones on a roof. The ship staggered, righted itself, staggered again. In spite of a firm handhold, Professor Bergman was thrown against an edge of the radar. He gasped as the blunt corner bruised his side.

Sweat was running down my forehead. At any moment I expected a more substantial piece of metal to burst in through the hull; but time went on and this did not happen.

After a while Uncle Lachlan shouted: "If the rotatory jets keep functioning we have a chance. The meteors are quite small—so far."

There was hope in his face. I lurched sideways to counteract a particularly violent tremor, and lines of

a psalm began to flicker on the screen of my thoughts: "Yea, though I walk in death's dark vale, yet will I fear none ill."

Spike had his arm round Janet, and in the midst of everything a curious pang of jealousy occurred to me. As the ship rolled and we were thrown about, struggling to maintain balance, she hid her face against his shoulder.

Professor Bergman's stout cheeks shone with perspiration. I decided to watch him; and at last I saw a change in his attitude. He relaxed a little. Where he gripped the back of a chair the knuckles of his hands grew less white.

He looked across at the rest of us and said: "I think—I think the main cluster is passing beneath us."

We waited. The ring of the particles striking the hull still went on, and the ship itself vibrated and swung. But almost imperceptibly the force of the onslaught began to diminish.

Janet looked up from Spike's shoulder. "We—we're passing through, aren't we?"

The Professor nodded. "I think so. A few seconds now."

The seconds passed. Gradually the noise decreased in volume and became transformed into a few desultory *pings*. The ship steadied, and we were able to stand up without holding on to anything.

Presently there was nothing at all to be heard outside.

Uncle Lachlan was haggard and pale. But he still retained command. Abruptly he said: "You may cut back the motor, Mr. Stranahan."

Spike nodded. He patted Janet's hand and released her. "Okay," he replied, vaguely. "Okay."

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He went stiffly across the floor to the switch panel and as he touched the controls the scream of the motor died away to its normal humming.

At that moment Madge emerged from the kitchen. For once she appeared startled and uncertain of herself. Her grey hair hung in wisps about her small, pinched face.

"Cor, love a duck!" she exclaimed, coming across to us. "Wot was all that blinking row?"

Janet said: "We were struck by a shower of meteors."

"Meteors! Blimey!"

"The jets brought us through," explained Uncle Lachlan.

Madge patted her hair, and I could see she was making an effort to control herself. "Wot next!" she said, with a crooked smile. "There was I, sleeping the sleep of the just, and dreaming of an air-raid, when suddenly—blow me down—it was an air-raid! And me with my curlers in!"

Her little joke was like oil on seized bearings. I felt tension slip away, and even Uncle Lachlan smiled.

"Yes, yes—quite so," he replied. "But in the meantime, Madge, we'd like some breakfast."

"Breakfast! Wot's the time?" she demanded.

Professor Bergman consulted his watch. "Half-past eight, dear lady."

"All right. I'll 'ave 'am and eggs ready at nine o'clock. And if I was you, Professor Bergman," she added, moving away, "and you, too, Dr. McKinnon, I'd spend the time till then 'aving a nice shave!"

When she had gone my uncle laughed. "Madge is right about that. We do need a shave."

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A S TIME WENT ON, however, the atmosphere in the ship again grew tense. Thirty hours went past, then forty, and still the radar beamed on Hesikos remained blank, except for a brief flicker when Asteroid Gamma crossed our path. I felt hotter and more uncomfortable than ever.

My uncle and Professor Bergman were continually in the laboratory, making notes on the unbelievable cold of outer space and on the thin, mysterious clouds of gas we sometimes met. Everyone's temper was on edge. I didn't dare speak to Uncle Lachlan; and even Janet and I, poring over the radar, began to snap at each other.

For most of the time, as the ship flew on at five thousand miles per hour, Spike sat by his motor, watching the dials; but during the forty-first hour of our journey he left his switch panel for once and came across to speak to us. Madge and Uncle Lachlan and Professor Bergman were in their rooms lying down.

"Say, Janet—any sign of Hesikos on that screen vet?"

" Nothing, Spike."

"There ought to be something," I said.

He nodded, sitting down astride a chair, his arms spread out across its back. "It worries me, kid. We've been flying for over forty hours, and at five

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thousand miles per hour we should be within a hundred thousand miles of our target right now."

- "We'll have to be patient," said Janet.
- "Patient—ugh!" His voice turned sour. "Those two dead-pan scientists made a mistake about the meteors. Maybe they've made a mistake about the distance to Hesikos."

There was a sound behind us. "Are you referring to Professor Bergman and myself?" inquired my uncle.

For a moment we were all startled by his unexpected appearance—Spike especially. But the American soon recovered his truculent air.

"Yeah, sure," he replied, with hard emphasis. "According to what you said before we left, we should have picked up our planet before now."

Uncle Lachlan stood by the radar, and his Scotch burr became more pronounced. "I see," he said. "Criticism would appear to be your main preoccupation on this journey, Mr. Stranahan. As an ordinary engineer, entirely ignorant of the theories of space travel, it would suit you better to concentrate on the efficiency of your motor."

- "Don't worry, Doctor." The other's voice was rough with anger. "If the water lasts out, the motor won't let you down."
- "Implying that you're not so sure about our calculations?"
 - "Yeah. You were proved wrong by the meteors."

Uncle Lachlan rubbed his chin. "Mr. Stranahan," he said, "when Christopher Columbus sailed out into the Atlantic, he had men among his crew without faith or vision. As the long days passed, and still there was no sign of land, they criticised his judgment and

called down curses on his head. But in the history of mankind those men have been branded as fools and cowards."

Spike was trembling. "Are you calling me a coward?"

"No. Merely a fool, perhaps."

"See here, Dr. McKinnon-"

Janet caught his shoulder. "Spike-please!"

He shrugged her hand away. "I won't stand for it!" he exclaimed. "I'm at liberty to speak—"

"You are at perfect liberty to speak," interposed Uncle Lachlan, "provided you know what you're speaking about. On this occasion you don't."

I thought he was being unfair and, with some hesitation, ventured to remind him that he'd forecast a signal from Hesikos at the end of forty hours. He snapped at me, telling me to keep quiet about things I didn't understand.

But Spike persisted. "The kid's right! And what's more—I don't like being called a fool and a coward!"

My uncle sighed. "It seems I will have to explain in words of one syllable. The human factor is the bane of Science. In simple terms, Mr. Stranahan—by taking avoiding action during our encounter with the meteors we were thrust a little out of our normal and direct course. This means that Hesikos won't appear on the radar for several minutes after our original expectation."

"That's all very well," began Spike; but Uncle Lachlan gestured him into silence.

"The time is now twenty past four in the morning. At twenty-one minutes, eight point six seconds past four—that is to say in about a minute—Hesikos should make its first appearance on the right-hand

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screen. That is why I got out of bed and came here—to make a personal check. Professor Bergman and I worked out the time independently."

"After we met the meteors?" asked Spike, dourly.

"Yes. And after Asteroid Gamma had been observed. If we are proved wrong, Mr. Stranahan, you will then have adequate cause for complaint. Let me see"—he glanced at his watch—"it is now almost twenty-one minutes past. Watch the radar."

He had gained our complete attention—even Spike's. We watched the grey oblong of glass; and slowly but surely the seconds ticked away.

Suddenly he rapped out: "In five seconds from—now," and began to count. "One, two, three, four," and as he came to "five"—like a miracle it was—a faint but unmistakable flash appeared on the screen.

At first no one said a word. There was silence in the ship, except for the monotonous sound of the motor. Then, in a dry tone, Uncle Lachlan said: "I think that answers your criticism, Mr. Stranahan. From now until we land on Hesikos that signal will continue to become clearer and more frequent. Meanwhile I should advise you to go back to your motor. It must be in good order for the landing, in twenty hours."

Spike refused to meet his eyes. He got up, dour and grim, and returned to the switch panel.

As the hours followed each other I began to be more confident—and more excited. Perhaps after all our journey was going to be successful. Perhaps after all we were going to be the first people in the world to reach another planet.

I didn't sleep much, and neither I'm sure did any of the others; but I wasn't in the least tired, physically at any rate. The only trouble was that, being so

"cabined, cribbed, confined", we were all becoming rather sick of one another. The incessant hum of the motor beat against our nerves.

I remember one occasion when Janet and I nearly quarrelled. She was giving me a reading for my graph.

"Time—seven-ten a.m. Interval—twenty-five point three-one seconds."

"I've got it," I said. "According to this we should be there in another five hours."

"Yes. I think we can take it easy now for a minute or two."

I laid down my pencil. "Janet—what will it be like on Hesikos?"

"How on earth should I know?"

"I mean—will it be warmer than on Earth? Will the atmosphere be lighter, or—"

"For goodness' sake," she cut in, sharply, "stop asking questions! You go on and on!"

I was taken by surprise. "Well, I—I just wanted to know. I didn't mean—"

Then, as I flushed and became silent, she leaned sideways impulsively, touching my hand. "Jeremy, I'm sorry. I'm all on edge. This journey has taken it out of me." She made a gallant effort to smile. "Anyway," she went on, "I can always tell my grand-children that you and I made a graph of the very first space flight!"

Before I could reply, Madge appeared from the kitchen and came across to us.

"Hello, you kids. Like a cup of coffee?"

Janet looked up. "In a minute, Madge. Come and sit with us for a while."

"Sure I won't interrupt your job?"

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"No. Everything's quite normal. As Dr. McKinnon predicted."

Madge sat down and made herself comfortable. "Just shows you, don't it? Leave the thinking to Dr. McKinnon, I said. Clever man 'e is. A real scientist."

"I know." Janet was recovering. "But sometimes—even though he is your uncle, Jeremy—sometimes I wish he was less of a scientist and more of a human being."

I admitted that I did get scared of him. "All the same," I said, "I expect if we had his responsibilities we'd be pretty snappy too."

"You're right, young Jeremy." For a moment Madge looked and sounded unusually serious. "Scientists ain't ordinary folk like you and me. They're dealing with facts. If they allow 'uman feelings to come into it they've 'ad it."

Janet sighed. "I'm afraid I'll never be a great scientist at that rate."

"Well, why worry?" Madge returned, brisk and good-humoured again. "Maybe you'll get married instead and 'ave a baby—and a baby is a far more important invention than a dozen spaceships."

By now Janet had got back all her good-humour. She grinned in my direction. "Quite a philosopher, isn't she, Jeremy?"

"She is, indeed."

Madge chuckled. "Oh, come off it, you two! Fancy me a blue-stocking!" She got up and patted her hair. "Now you'd better get on with your job," she advised us. "I shouldn't be gossiping 'ere at all. Wait five minutes and I'll bring you a nice cup of coffee."

Four hours later—at half-past eleven—my graph was almost complete, and the curved line was pointing down directly above the tiny circle marked "Hesikos".

At a quarter to twelve my uncle and Professor Bergman appeared from the laboratory. They called to Madge. She came out of the kitchen, and we all gathered in the tail of the ship, near Spike. Excitement began to tingle inside me. The main compartment seemed to be cooler now—so cool that once or twice I caught myself shivering.

We had grown quiet, and there was a look of strain on everyone's face—on everyone's, that is, except Uncle Lachlan's. He was as rugged and calm as ever. His spectacles glinted under the yellow light, and behind them his eyes were steady.

"I have a few words to say to you," he began.

"Our journey is nearly over, and at twenty-one minutes past twelve our hydraulic landing-gear should make contact with the soil of Hesikos."

"We hope!" said Spike.

I had been sympathetic with Spike before, but now I resented this petty sneer. Uncle Lachlan, however, remained unperturbed. "There is no possibility of error, Mr. Stranahan, so long as your motor continues to function normally."

"It will," rapped back the American.

"I'm glad to hear it." There was an icy pause. Then my uncle went on: "What happens is this. At about sixteen minutes past twelve we should enter the atmosphere of Hesikos. By pressing this stud "—he leaned forward and indicated a white button on the switch panel—"I will release a large parachute in the nose of the ship. At the same time Mr. Stranahan

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will shut off the rotatory jets. As a result the ship will swing round, with its stern towards Hesikos, and we shall find that what is now the rear wall—beside us here—will become the floor again, as it was before we left the Earth. Do I make myself clear?"

Obviously he was speaking in particular for the benefit of Janet, Madge and myself, to whom the detailed mechanics of the flight had always remained rather a nebulous quantity. All three of us assured him that we understood.

He continued: "Now, on account of our weight, the parachute by itself would not be sufficient to ensure a safe landing. But as soon as it is released, Mr. Stranahan will bring the main jets into action. Pointing down towards Hesikos, they will act as airbrakes, and we ought to land as lightly as a feather—and in the proper position for a take-off later on."

I started to speak, but he interrupted me. "I know what's in your mind, Jeremy. I can assure you there are no great stretches of water on Hesikos—at least on the landing-ground we have chosen. As far as Professor Bergman can make out through the telescope in the laboratory, we should come down on what looks like a rolling plain."

The Swede wrinkled his high forehead. "It may be thick undergrowth. I am not sure."

"In any case there is nothing to interfere with a landing." Uncle Lachlan paused and looked at his watch. "That is all for the moment," he said, crisply. "At fifteen minutes past twelve—in roughly twenty minutes from now—I want you all to be back here in your places, with safety-belts fastened. As the parachute opens and the ship adjusts itself, there will be a few moments of—unpleasantness. But as long

as we take precautions no harm should be done. From now until a quarter past twelve you may occupy yourselves as you think fit. Professor Bergman and I are going to see that the instruments in the laboratory are firmly secured. Especially the telescope."

As the two men went off, their footsteps echoing on the steel floor, I noticed that Janet was looking up at Spike. He grinned at her, in the warm infectious way he had.

"Don't worry," he said. "It'll be easy now. The landing's my pigeon."

We left him to check his motor. As we stood by the radar Madge remarked: "'E's an optimist, all of a sudden!"

"Oh, I understand how Spike feels," returned Janet, quick to take his part. "It's not so bad when there's something definite to be done."

"I suppose it isn't," Madge agreed, thoughtfully. Suddenly she smiled. "Come on, ducks—you and I had better visit the kitchen and get cracking with our toilet. If there's 'uman beings on 'Esikos we'll 'ave to look our best."

Janet was surprised. "But I say, surely there's no need—"

"Now then, that won't do," interrupted the housekeeper. "You're a perfect fright, with your 'air all mussed up and a ladder in your nylons. You want some powder and a touch of lipstick—and I've my new 'at to put on."

"All right." Janet visibly brightened. "What about some lipstick yourself?"

"Don't worry, love. I've got some. 'Discreet' it's called—for the 'not so young'."

They went away towards the kitchen, arm-in-arm,

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leaving me alone. But half-way across the floor Madge paused and said over her shoulder: "Take my advice, young Jeremy. Put a comb through that 'air of yours. It's standing on end like a porcupine."

Somehow the time passed. At twelve-fifteen, with the hum of the motor still quietly persistent, we gathered in the stern again and fixed our safety-belts. The ladies looked smart and fresh, as if sixty hours confined in a spaceship had meant nothing to them. Spike seemed to have shed his grouchiness, while my uncle and Professor Bergman had their usual air of unemotional detachment.

No one spoke, however; and the excitement which churned in my tummy grew almost unbearable. In the next few minutes we should meet triumph—or a lonely, unrecorded death.

Suddenly Uncle Lachlan looked up from his watch. "Are you all ready? Safety-belts fastened?" We nodded.

"You know what to expect," he went on. "When I release the parachute the ship will be thrown about, violently. So please find something to hold on to."

There was a short silence. Then the ship seemed to tremble, and the blood seethed through the veins in my head.

Uncle Lachlan put the watch back in his pocket. "The time is twelve-sixteen. At this moment we are entering the atmosphere of Hesikos. I am going to release the parachute—now."

He touched the white button. Almost simultaneously Spike reached forward and switched off the rotatory jets.

At first nothing happened. Then, without warning, we were plunged into chaos. I had the feeling that the

ship was falling away beneath me, as if I had no longer any weight. My feet jerked and slipped in the struggle to maintain contact with the floor. The forward end of the ship heaved up. I tried to counteract the violent swing, and the safety-belt bit hard into my chest.

The others seemed to be tumbling over and around me. An empty cup and saucer fell on the wildly sloping floor and slithered with a crash among our feet. I had a glimpse of Janet's face. It was dead white. Professor Bergman's black jacket was open, and I saw streaks of tobacco ash on his waistcoat—streaks which swung above and below me in a fantastic dance.

But in a second or two the full violence of the turn was over, though the ship still swayed with alarming irregularity. I found myself standing upright, pressing my shoulders against what a minute ago had been the floor. Awkward angles reappeared. The doors of the three forward rooms swung high above our heads, and the switch panel now lay at our feet. When Uncle Lachlan shouted for the main jets, Spike had to bend down to press the lever.

As he did so the hum of the atomic motor surged up, filling the compartment with its high-pitched scream. I tried hard to command my nerves.

"You'll hear the jets in a minute," Uncle Lachlan called out. "We'll be travelling down into the sound."

We heard them almost as he spoke—a harsh roar coming up out of nothing and gradually beating down and obliterating the whine of the motor; and I soon realised their tremendous power as air-brakes. The floor began to press up against the soles of my feet, that my legs, from the knee upwards, ached under the strain. But after a few seconds the sensation passed.

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The ship became steady again, and I could stand away from the wall without holding on to anything.

Uncle Lachlan had his eye on me. Presently, glancing at one of the dials, he said: "Not long now. We're only five thousand feet up—"

He stopped abruptly. From inside the atomic hatch had come a jarring squeal of tortured metal. In a moment both the motor and the jets were silent, and a great hand of terror closed on my heart.

Professor Bergman exclaimed: "Mr. Stranahan—the jets!"

I saw Spike fall to his knees, frantically tugging at the lever. His voice came up to us, harsh and desperate. "The main control! The main control has jammed!"

We stood there, terrified and unable to move. Even Uncle Lachlan had lost something of his scientific calm.

"It's the oil-gland in the switch-gear." Spike looked up at us, his face pale and pitiful. "The motor has seized."

Uncle Lachlan's body tensed like a wand. "You fool!" he shouted, suddenly. "I told you—"

On his knees as he was, Spike appeared to be begging for forgiveness. "I couldn't help it!" he cried. "I couldn't help it!"

My uncle controlled himself, but drops of sweat glistened on his forehead. "We're bound to crash now," he said. "But the parachute and the landinggear may save us. Brace yourselves!"

We caught hold of whatever support was nearest. There was a thin whistling sound outside—the sound of air rushing past the falling ship.

For a second Madge forgot herself. "We'll au to killed!" she screamed.

Professor Bergman put his arm about her. "Steady, Madge!" he encouraged her.

She bit her lip and said nothing more.

Uncle Lachlan looked at me. All at once I understood that all his anxiety was for me and the others—not for himself.

"Any moment now," he said, quietly. "Hold on."
The whistle outside grew shriller. I tensed my legs
and clutched the ring-bolt of my safety-belt. I felt
sick and terribly tired.

Then it happened. There was a dull crash. The floor jarred against my legs. Every bone in my body seemed to buckle up in pain. Compressed air shrieked below us, escaping from the hydraulic landing-gear. Loose objects bounced and rattled inside the steel hull.

Twice the ship heeled over and heeled back, flinging us from side to side. Twice I thought we were done for. The light-wave radio-transmitter was torn bodily from its place and fell with a splintering sound at my feet.

Janet was sobbing.

But at last—unbelievably—the ship settled down, and the compartment was upright again. There was a dead and empty silence.

After a moment I looked round. No one seemed to be injured.

It was Spike, still on his knees and no longer arrogant, who spoke first. "Doctor," he muttered. "I'm sorry."

Uncle Lachlan smiled. "Nothing matters now," he answered. "We have landed on Hesikos—the lost planet—and we are still alive." His eyes glinted, and his voice took on a ring of triumph. "Mr. Stranahan," he said, "get up and open the main hatch, please!"

THE PEACE OF HESIKOS

SLOWLY SPIKE got to his feet and, like the rest of us, began to unfasten his safety-belt. I remember thinking: "We're alive—that's the important thing. We're alive, and the first people to have landed on another planet. Outside the ship there's a world no human being has ever seen before."

But Madge broke the spell. "Cor, lumme," she exclaimed, unexpectedly, "I feel as if I'd jumped down from St. Paul's!"

We all laughed—even Uncle Lachlan.

Spike crossed to the switch operating the main hatch. For a moment he paused. Then he put his hand up and pulled down the lever, and with a slow rumble the hatch rolled back.

A glare struck our eyes, and the yellow light from the electric bulbs became dim in comparison. But the effect of unbearable brightness lasted only for a moment. Almost at once we crowded to the open hatchway and looked out, the terrors of the crash and the damage to our motor temporarily forgotten.

The picture took my breath away. There below us, under a pale silvery sky, was the countryside of Hesikos—a strange countryside, pale green and uncultivated, and dotted here and there with tufts of

what looked like a white flower. Above a line of pointed hills swung the red disc of the sun, appearing slightly smaller than on Earth. In some ways the landscape, though beautiful, looked natural enough. But there was something odd about it, too—something I just couldn't take in all at once. It had to do with the shape of things, with the pale pastel colours and the closeness of the horizon.

Janet was holding my arm, tightly. "There's not a living thing to be seen," she said.

"Except the plants and the grass," I returned, pedantically.

Behind me Uncle Lachlan switched off the lights and said: "I don't think it's grass—as we know it. A species of moss, I imagine."

But I knew—and Uncle Lachlan knew—that what Janet had actually meant was that Hesikos appeared to be uninhabited by living creatures like ourselves. Signs of cultivation were entirely absent. There were no roads or buildings—just a plain, untouched countryside rolling away to the pointed hills. Nor was there any evidence of the existence of beasts or birds. We got the impression that this locality at any rate had lain peaceful and deserted for hundreds, perhaps thousands, of years.

Soon, however, we got over our initial and illogical feeling of disappointment. There was a wonderful scent. We all remarked on it—a scent that was neither sweet nor cloying but unexpectedly satisfying, like the perfume of a rose in October. The warm air was clear and fresh, and details of the landscape stood out with such crystal clarity that we might have been looking at them through the magnifying lens of some expensive camera. Professor Bergman said that it

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reminded him of a summer day in Northern Sweden.

"At the same time, the atmosphere is a good deal more rarefied than on Earth," remarked Uncle Lachlan. "And as the force of gravity is also less, Jeremy may be able to do a long jump of about thirty feet down there."

Suddenly Madge emerged from a daydream. "Well—wot are you all waiting for?" she exclaimed. "Down you go and 'ave a look. Don't go far away, though. I'll 'ave lunch ready in 'alf-an-hour."

"Good for you, Madge!" My uncle sounded uncommonly genial. "But," he added, "what about your new hat?"

She shrugged. "There's no one 'ere to appreciate it. So I may as well just take it off and get on with my job, provided the stove's still in one piece."

"Very well—but don't use the stove too lavishly," he warned her, momentarily serious. "Like everything else it will now be running off the reserve batteries."

"All right, I'll take care."

Madge went off, and Spike inquired: "Well-who's going down first?"

"Jeremy, I think. Then Janet," said my uncle.
"Youth has a privilege. Other things being equal, they will both remember this moment rather longer than the rest of us."

I was only too eager to comply with his suggestion. As I stepped on to the ladder Janet laughed and said: "Take care not to trip. It's a long way down!"

And, of course, the first thing I did was to trip. I must have fallen at least twenty feet; but to my surprise I didn't hurt myself at all and landed as lightly as a feather on the ground below the ship.

For a moment I felt giddy. Then I got up, brushed the knees of my flannels and discovered that the others had already climbed down and were standing there, grinning at me.

"As good an object lesson as any," said Uncle Lachlan. "On Earth you might have broken your leg. Nevertheless, we'll have to be careful in these conditions."

"If we want to cross a river, I guess it'll have its advantages," drawled Spike.

Janet took his arm. "You mean we could jump across?"

"Yeah. Sure."

Professor Bergman laughed, deep in his throat. "Allow me to suggest that the next Olympic Games are held on Hesikos!"

"A few records would certainly be broken in the field events," returned Uncle Lachlan, with a smile. "But long-distance running would be more difficult. Athletes would find themselves short of breath pretty soon. We must be careful not to over-tire ourselves."

It was warm and peaceful, without a breath of wind, and the turf under our feet was like a springy carpet. The only incongruous object was the ugly red spaceship, towering above us and draped with the white parachute, and the scars of brown earth where the landing-gear had struck. The pleasant scent was more in evidence now, and I had an idea that it was coming from the white flowers. They appeared to be everywhere, sprinkled like stars on a green tablecloth.

We examined the curling moss which I had imagined at first to be grass.

"You know," said Spike, "it's like stuff I once saw in the Arctic. I was engineer with a weather-

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station in Greenland at the time—and when the ice melted in the summer moss like this began to grow all around."

There was an odd little silence, as if Spike's mention of the Arctic had brought a passing chill into the warmth of the day.

Uncle Lachlan bent down and uprooted one of the flowers. After turning it over in his hands he said: "This plant seems to be quick-growing, too."

"Hasn't it a peculiar shape!" remarked Janet.
"I mean, the leaves and petals are so—so elongated, isn't that the word?"

As we walked slowly round the ship, several things that had been puzzling me took on a definite pattern in my mind.

The colours, for instance. The prevailing colour was green all right, just as it is on Earth; but here it was paler and more uniform. As far as eye could see there was no variation in shade, no dark patches such as I remembered in marsh and meadowland at home. There was contrast, however, in the numerous clumps of white flowers; and where outcrops of rock appeared the stone was pale pink, like the flesh of a sea-trout. About it all was a haphazard beauty, as if a clever child with a box of green, pink and white crayons had been at work.

Then the shapes. Not far from the spaceship stood a number of isolated trees. They were the strangest trees I had ever seen—long and spindly, with branches growing *upwards*, not outwards as on Earth. Everywhere—in rocks and plants and trees—we noticed other shapes so thin and fragile that they could never have existed in a denser atmosphere or in a world with more considerable gravity. Even the hills in the

distance were narrow and pointed, as if some giant had been trying to sharpen them with a blunt knife.

And then Spike put into words the most striking point of all. "There's something darned queer about that horizon," he said. "It's miles closer than back on Earth."

Professor Bergman thrust his hands into the pockets of his black trousers and leaned against a pillar of the landing-gear—a most unscientific performance. "Yes," he murmured, "our theories have been proved up to the hilt. But it is interesting to observe reality."

"How do you mean?" asked Spike.

"Well, take your horizon first," returned the Swede, smiling. "It is close, simply because Hesikos is smaller than the Earth and so curves away more quickly. Then the shape of the plants—and of the hills. Here in Hesikos the atmosphere is light, and the force of gravity is much less powerful, as Lachlan has already pointed out. Things tend to spread upwards. You understand?"

Spike nodded. As for Janet and myself, it occurred to us both, I think, that we ought to have worked out such simple and logical reasons for ourselves.

"And the colours," Professor Bergman went on.
"They are clear and beautiful because the sunlight is not deflected and filtered as it is in our own world."

Presently Janet said: "But what about the moss—like Arctic moss, according to Spike? And the absence of living creatures?"

"We cannot say, of course, that living creatures don't exist on Hesikos," he replied. "For all we know they may be watching us now. But the moss—that is different." He hesitated, and lines of worry appeared on his forehead.

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Again a breath of cold seemed to invade the pleasant atmosphere. I couldn't understand it.

"Well, what's the pay-off?" demanded Spike.

Professor Bergman glanced at my uncle, as if for guidance. Then he took his hands from his pockets and stood upright.

"The carpet of green moss, the little flowers, the the quietness of it all—they suggest only one thing. I believe that in winter this part of Hesikos is covered deep in ice."

Even then I didn't grasp the full significance of his discovery. But I noticed that for a moment the expression in Spike's eyes became anxious and withdrawn.

Uncle Lachlan nodded. "I think you are right, Lars—though it is difficult to judge, of course, on a first reconnaissance." Suddenly he smiled, as if determined to remain cheerful. "Now, I propose we return to the ship and have our meal. I don't know about you, Jeremy, but I'm jolly hungry! Afterwards we can explore farther afield—say to the little wood yonder—bearing in mind that even at this time of year, the height of summer, daylight on Hesikos only lasts for nine hours. Come on," he chuckled. "Madge will read the riot act if we're late for lunch!"

After our steak and onions, which seemed to taste far better than steak and onions had ever tasted before, we discussed our programme for the afternoon—or at least for the four hours of daylight left to us. Spike said he wanted to have a look at the motor, to estimate the damage and see what could be done about repairing it; and Professor Bergman decided to remain behind, too, and help in this necessary task.

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It was important to get the motor running again, if only to relieve the reserve batteries.

"Janet and Jeremy and I had thought of taking a walk in the direction of the wood," said my uncle. "Just to make sure of our bearings for a longer trip to-morrow. What about you, Madge?"

She bustled about, clearing away the table. "Oh, well, I'm not so interested in 'Esikos if there's no 'uman beings. The ship got knocked about a bit when we were landing, so I think I'll spend an hour tidying up."

"Good idea," approved Uncle Lachlan, patting her shoulder.

Ten minutes later, he and Janet and I set off on our first journey of exploration. Janet had her camera and took half-a-dozen pictures of the ship before we left.

Walking was easy. Every stride carried us farther than on Earth, and it soon became obvious that as long as we didn't attempt to hurry we could cover long distances without much effort. In about ten minutes we had reached the edge of the little wood.

Close at hand, the trees looked decidedly odd. They were all less than six feet high, with bushy, pale green branches, and the softness and sappiness of their stems suggested speedy growth. On several of them we found red fruit, shaped like pears and growing upwards, like fat candles on a Christmas tree. We tasted one of them, and it was delicious—" out of this world", as Spike would have said, appropriately for once. The flavour was delicate and not too sweet, and the tender flesh melted in your mouth like lemon curd.

Janet put a colour-film in her camera and took a few photographs; then I picked some of the fruit

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and stuffed it into my pockets to take back to the ship.

Beyond the trees we came upon a small lake, its clear water glinting in the sunlight. In the centre was a regular pulsing movement, which seemed to indicate that its source was an underground spring. Uncle Lachlan was delighted, for it would supply not only fresh water for domestic purposes but also fuel for the ship's return journey. Its shore was of smooth pink sand, sprinkled with jagged white pebbles which, it seemed, were a type of quartz much older than anything found on Earth. I threw one of the pebbles into the water and watched with surprise how the splash rose high into the air and settled back with slow deliberation.

Janet let some of the sand run through her fingers. "Have you discovered any signs of iridonium?" she asked, looking up at Uncle Lachlan.

He smiled. "Well, in the first place I personally wouldn't know what signs to look for. But the Professor thinks we'll only come across it in the deep valleys—or perhaps in the face of a cliff. It's not a surface metal."

- "Would much of it be needed to make gold?" I said. "I mean, would it have to be mixed with lead in about equal proportions?"
- "No, Jeremy—that's a peculiar thing. According to Professor Bergman—he's the expert on this—half-an-ounce of iridonium ought to combine with a ton of lead to make a ton of gold. The only trouble is, he hasn't yet discovered the catalytic element—as Hermanoff pointed out. But he will, in time."
- "You and Professor Bergman are going to be pretty rich men," I said.

"That's a possibility." He sounded placid and strangely unlike his usual self. "But you know, here on Hesikos the idea of money doesn't seem to matter. Even the scientific urge tends to desert us."

We noticed that the water in the lake flowed off in a tiny stream. Like a silver ribbon it ran across the undulating green turf, finally vanishing over the edge of what appeared to be a cliff, a few hundred yards to our right. Uncle Lachlan said it would be interesting to find out where it went.

"Perhaps into a deep valley," suggested Janet.

"Very likely. Anyway, the cliff-edge isn't far away. We'll have plenty of time to walk there and back to the ship before it gets dark."

"Yes, let's go," she agreed, with enthusiasm. "It's always exciting to look over the edge of anything."

THE LEDGE

THAT CLIFF reminded me of a picture I'd seen of the Grand Canyon in America. It went down for over a thousand feet, a craggy face of pink rock with small, tough-looking bushes sprouting from it at irregular intervals.

A mile away a similar cliff rose up to form the opposite side of the valley—a valley so deep that as we looked into it we could make out few details. All we could be certain of was that a river ran through it, among what appeared to be scattered rocks. Beside us the stream from the lake curved over and fell downwards in a thick spray, joining the river below as one of its tributaries.

How this great rift had been caused I had no idea. Stretching as far as we could see on either side, it was as if a giant had brought down the edge of his hand in a vicious blow, splitting apart the rolling green countryside. But there was a sense of peace and grandeur about the place—an atmosphere of calm which prevented you from feeling too much fear as you looked down. I haven't a good head for heights as a rule. Here I could stand on the very brink of space without anxiety.

"We must try and explore down there tomorrow," said Uncle Lachlan. "Only trouble is, the cliff runs on for miles."

Janet pointed to the left. "There's a dark shadow yonder, below that other grove of trees. I wonder if it could be a corrie leading down?"

"It might be," he answered. "Pity we haven't time to make certain to-day."

She knelt on one knee, looking over at the boulderstrewn bed of the valley. "D'you think we might find iridonium among those rocks?"

He nodded. "Perhaps on the banks of the stream, or at the base of the cliff. There seems to be no vegetation at all."

Immediately below me—about fifty feet down—were a number of small bushes, sprouting from earthfilled crevices in the cliff. They were different from the sappy trees of Hesikos and looked hard and wiry, like bush-scrub in Australia.

I leaned forward to see them better. As I did so a piece of turf broke away beneath my feet and went slithering out into airy emptiness. I stepped back. A larger piece of turf started to move, and Uncle Lachlan shouted a warning. I tried to jump, but the mass subsided under my weight. I flung myself sideways. My fingers scrabbled on the edge of the cliff. For a moment they stuck in the soft earth. Then, as Janet screamed, they slipped and slid. I felt myself falling, falling into nothingness.

It was the most terrible experience of my life—far worse than when the spaceship took off or when it landed. A thousand feet down. That was the thought in my mind. That was the thought that made my muscles hard and tense, even as I fell.

Then suddenly—instinctively—I put out my hands. They touched and caught one of the small bushes growing in the cliff. I held on, with my feet swinging

THE LEDGE

in space. Almost at once its roots came away in a shower of brittle earth, and I began to fall again. But this time for not more than a second. Though proving only a temporary support, the bush had broken the speed of my fall and swung me in towards the face of the rock. A jarring pain went through my elbow as I landed on a flat ledge.

I looked up. High above me I saw Uncle Lachlan and Janet peering down over the edge. Their faces were white; but in the silent air their voices came to me distinctly.

"Oh, Jeremy, are you hurt?" cried Janet.

I told her briefly that I wasn't.

Uncle Lachlan called out: "Stay quite still, Jeremy. And don't look down. We'll get you up in a minute."

"There's plenty of room here on the ledge," I answered, keeping control of my voice. "Don't worry."

For a time they spoke together, so quietly that I couldn't hear. Then they both stood up.

"Janet is going back to the ship for a length of rope," Uncle Lachlan told me. "You're only about fifty feet down. We'll be able to pull you up quite easily."

"I'll run all the way," promised Janet. "Keep your chin up!"

When she had gone my uncle said he was going to make a short reconnaissance. "There may be a way I can get down to keep you company," he said.

"Don't risk anything," I shouted back. "I'm all right. Honestly I am!"

But he insisted that he must make an effort to reach me. "The main thing is, move about as little as you can. And don't look down." He moved off to the left.

"I shan't be long. If I can't find a way I'll come back at once."

Up till now I had been trying to sound steady and confident. Almost as soon as Uncle Lachlan disappeared, however, reaction set in and I began to be afraid. It wasn't cold on the ledge, but I was shivering.

After a while I moved—and one of my feet slipped over the edge. Just for a moment I turned and looked down. Far below I saw the valley and the jagged rocks, like a photo from a plane. A spasm of sickness surged up in my throat. I shut my eyes and clenched my fingers and pressed close to the face of the rock.

I lay there for what seemed like hours, tense and cold, trying not to think of the awful abyss at my back and wishing that Uncle Lachlan would return to the cliff-top and speak to me. He'd find no way down—I was sure of that.

Presently I opened my eyes. I wanted to look up but was afraid to move. How long would it be before Janet came back with the rope? When she did come, would it be long enough? If it were long enough, would I have the strength to hold on as they pulled me up?

A kind of panic came to me, running through my body like a fever. Suddenly I wanted to scream. Suddenly I wanted to jump from the ledge and bring this dreadful ordeal to an end.

And at that moment something happened—something that is difficult to explain. It was as if a friend had suddenly arrived to soothe my fears and give me courage. Indeed, I glanced over my shoulder to see if Uncle Lachlan were somewhere near. But there was nothing. Just the great emptiness above the valley.

I lay still. I wasn't cold any more, and somehow the

THE LEDGE

terrible sweep down of the cliff no longer seemed to matter. As the seconds and the minutes went past the daylight began to fade. But my panic had gone. I was certain that nothing could harm me now.

Then there was a sound at the top, and I looked up and saw my uncle.

- "All right, Jeremy?"
- "Fine," I told him.
- "Good boy! Sorry I couldn't find a way. But I see Janet coming, with Spike. It won't be long now. . . ."

When Janet and Spike did arrive and the rope came floating down across the ledge, I tied it round my waist and was soon pulled to the top. As I scrambled on to solid ground and recovered my breath Uncle Lachlan and Spike patted me on the back, and for some unaccountable reason Janet kissed me. They seemed to think I had shown some courage.

I didn't tell them about my strange experience. They might have concluded that the strain had been too much and that I was imagining things.

We got back to the ship as darkness fell, like black velvet being thrown over us; and that night, as I lay on my mattress before going to sleep, the quiet feeling came to me again. Inside me I seemed to hear a voice—a peaceful voice telling me not to be afraid.

ROCKY VALLEY

"TRE, WAKE UP, young Jeremy! Wake up!"
I struggled back to consciousness. "Eh?

What is it, Madge?"

"Time for breakfast," she said. "Everybody else is tucking in at 'am and eggs. All except Janet. She's watching 'er figure and eating one of them red pears you brought back yesterday."

"Well, I suppose I'd better get up," I admitted,

yawning. "I'm ravenous."

"No wonder, son. You 'adn't much supper. Come on, now. You're fine as you are, in your dressing-gown. Your uncle's keen to get away and 'ave a look at this valley you found."

Fully awake at last, I thrust back the blankets and stood up, edging my bare feet into slippers. "Gosh, I hope he won't go without me!"

"No. 'E's waiting," she replied, with her usual

placidity.

I emerged from the curtains to find all the others at the dining-table, "tucking in" as Madge had said. Janet and Spike had humorous remarks to make on the subject of my dishevelled appearance, while Professor Bergman eyed the huge quantity of ham and eggs brought to me by Madge and quoted some pawky Swedish proverb which made everybody laugh. I felt pretty happy that first morning on Hesikos.

ROCKY VALLEY

"No ill effects after last night on the cliff?" inquired Uncle Lachlan.

"None at all," I assured him. "Except that my left

elbow's still a bit sore."

He patted my knee and said how glad he was; and it was then I fully realised what a change had come over him. Though still hard and craggy in appearance, he no longer sounded curt or unsympathetic or impatient, and his eyes, behind the big spectacles, were warm and kindly. I remembered what Janet had told me on my first night at Inverard—that when Hesikos came near the Earth thousands of years ago all the nations laid down their arms and were at peace. Could this be true? Was there an influence at work?

I hadn't been sitting at the table for long when Professor Bergman and Spike excused themselves, saying they wanted to start work again on the atomic motor. I asked how they were getting on, and for a moment the Professor's good-humour deserted him.

"I am not happy about it," he confessed. "All afternoon yesterday we have examined it. We cannot locate the root of the trouble."

Uncle Lachlan waved a cheerful hand. "Don't worry, Lars. You'll find it."

"We'll do our best, anyway," promised Spike as they moved away towards the switch panel. "Be sure you bring back good news from Kocky Valley."

"And if you find iridonium," put in Professor Bergman, regaining some of his scientific spirit, "remember not to touch it with your hands."

When they were out of earshot Janet looked across at my uncle. "Dr. McKinnon, is the damage to the motor serious?" Her voice was quiet.

"Yes," he said, with equal restraint. "Very serious."

I had a twinge of uneasiness. "But if it can't be repaired—I mean, is it possible we won't get back to Earth?"

Smiling, he flicked the ash from his cigarette. "Now, Jeremy, go on with your breakfast and don't be a grouchy old pessimist. Professor Bergman and Spike will find the trouble—that's certain. Meantime, our job is to explore Rocky Valley, and if you're bent on finishing all that toast do please hurry up about it!"

To have my leg pulled by Uncle Lachlan was something of a novelty. "I'll speed it up," I said.

Fortunately the dark shadow which Janet had spotted the previous afternoon did turn out to be a transverse fault in the cliff—a steep corrie through which we were able to climb down to the floor of the valley.

When we reached our objective we found that the air at the bottom was a good deal heavier than up above. Walking was more difficult; and the unbroken carpet of jagged rocks put us at even more of a disadvantage. We picked our way carefully, however, and camé at last to the edge of the river. Swiftly tumbling over its uneven bed, the water was clear and fresh; and when I stooped down I found it quite warm.

Uncle Lachlan surveyed the litter of pink and white boulders. "I should think they're very old, probably thousands of millions of years. But if Professor Bergman is right, it's in a valley of this kind that we should find iridonium."

[&]quot;What's iridonium like?" I asked.

ROCKY VALLEY

He shook his head. "Your guess is as good as mine. Nobody's ever seen it."

- "But then, how will we know-I mean-"
- "You underestimate the resources of science, Jeremy." From the inside pocket of his jacket he took a metal tube about a foot long, with a dial at one end like the face of a watch. "This is a detector," he said. "Invented by Professor Bergman. You've seen it, Janet?"

She nodded. "I remember it at Inverard. A kind of mechanical spectroscope, isn't it?"

- " More or less."
- "But how does it work?" I asked.
- "Let me explain. You know that each different kind of metal has a special wave-length?"
 - " Yes."
- "Well, Professor Bergman is an expert with the spectroscope, which is simply a telescope and prism combined. Using it patiently night after night over a long period, he found that Hesikos contained a certain metal with a wave-length unknown on Earth. He called it iridonium. Then, by analysis of its light, he discovered that a small amount of iridonium would produce gold if mixed with lead. Now then—this detector is adjusted to the sharply defined wave-length of iridonium. Held close above any ordinary metal it remains silent. But near iridonium it ought to make a whirring sound, like a mine-detector."

It was a clever idea—and simple, too, when you came to consider it. Uncle Lachlan read my thoughts.

"All science," he reminded me, "is based on simple logic." Then he smiled. "That sounds rather pompous, doesn't it? And we're not getting much forrader with

the job. Let's switch on the detector and see what happens."

For the next two hours we worked hard, moving along the bank of the river. But never once did a sound come from the detector. It remained inert and silent—as silent as the scented air which flowed down through the valley.

As we stumbled on among the rocks we began to feel tired—especially Janet, who was wearing thin shoes. And in the end Uncle Lachlan decided to change his tactics. The scattered boulders having proved entirely negative, he suggested that we should try our luck at the base of the cliff.

Janet and I agreed. We turned our backs on the river, therefore, and started to pick our way towards the soaring precipice on our right. Once or twice my uncle and I had to help Janet across a sharp ridge of boulders; but as we left the river behind the going became easier.

"I wonder how this valley was formed?" remarked Uncle Lachlan, as we neared the cliff.

"Spike was talking about ice," I said. "Could it have been made by a glacier—sweeping the rocks along with it?"

"That's possible," he answered, with a hint of surprise in his voice. "Probable, in fact." Then he added: "What do you think, Janet? Is this nephew of mine going to be a scientist, too?"

She laughed. "I shouldn't wonder. He asks plenty of questions at any rate!"

"A good sign! Remember Wordsworth—'Obstinate questions are the fount of knowledge'."

By this time we had arrived at the foot of the cliff. Here we were in shadow, for the sun was hidden by

ROCKY VALLEY

the majestic mass of rock towering above our heads. But it wasn't in the least cold. I felt warm, in fact, after our strenuous scramble.

Once again Uncle Lachlan switched on the detector. First he moved it up and down against the cliff, then out for a few feet above the floor of the valley. Slowly we worked our way back towards the corrie, testing every inch of stone within the angle of the precipice. But the minutes passed and nothing happened, and success seemed to be as elusive as ever. In the end I couldn't resist making a dissatisfied and irritable exclamation.

Still holding the detector in front of him, Uncle Lachlan grinned back across his shoulder. "If you're going to be a scientist, old chap, you'll have to cultivate patience!"

Then, just as he finished speaking, we all heard it a faint, almost imperceptible whirring noise. He jerked his head round, looking in front again.

I said quickly: "That was from the detector, wasn't it?"

- "It was," he answered.
- "Why did it die away so soon?" asked Janet.
- "Wait." His left side was almost touching the perpendicular rock. "The reaction may have been caused by something in the cliff here—or by something in or near that white boulder farther on."

Carefully he moved the detector up and down close to the discoloured pink rock. But though he took his time and made sure that the examination was a thorough one, nothing happened. The instrument remained silent.

He took a step forward and sideways. "The cliff's no good, it seems. Now for the boulder."

And almost at once, as he pointed the detector down, the whirring noise returned. Excitement began to prickle in my bones, and I saw that Janet's eyes were sparkling. We were on the right track now.

It was soon apparent that the cause of the reaction must be situated a few yards beyond the white boulder. The noise became clearer and more sharply defined, until at last it reached its peak when Uncle Lachlan paused above a patch of loose rubble. I went forward and moved the stones with the toe of my shoe. At first I could see nothing unusual. Then I spotted among them a small round pebble about the size of a robin's egg. It shone like phosphorus and was somehow different from anything I had ever seen on Earth.

As I bent down Uncle Lachlan said quickly: "Don't touch it, Jeremy. Professor Bergman thinks iridonium may be radio-active. Only very slightly, of course."

"You think that's iridonium?"

"Must be, according to the detector."

Janet said: "Are we going to take it back to the ship?"

He smiled. "Oh, yes, indeed. The Professor will gloat over it."

He switched off the detector, fished in his pocket and took out a small box, which, when he opened it, I discovered to be lined with lead. Cautiously, using the narrow end of the detector, he pushed the shining pebble into the box.

"Extraordinarily light for its size," he remarked, as he closed the lid.

I felt triumphant, and so did Janet, I know; but my uncle gave no sign that he was particularly pleased. Quite casually he returned the box and the detector to

ROCKY VALLEY

his pockets. Then, observing that we needed a rest, he squatted down on the boulder and lit a cigarette.

"Just think of it," said Janet, "A few more pebbles like that would make us the richest people in the world."

"Riches? What are riches?" returned Uncle Lachlan, abruptly. He paused, and the whole valley seemed to hold its breath. "That's odd," he murmured, with a puzzled look. "Those words were suddenly put into my mind."

Remembering what had happened on the cliff, I knew how he felt.

He got up and looked around, at the precipice above and at the wide empty sweep of the valley. "There is something here we don't understand," he said, at last. "But—I don't think we need be afraid of it."

SPIKE'S CONFESSION

When we returned to the ship, Professor Bergman immediately left his work on the motor to congratulate us on our discovery. Without a minute's delay he whisked Janet off to the laboratory, where he proposed to examine the iridonium at once and dictate preliminary notes.

Madge was preparing a meal in the kitchen, singing quietly to herself. The tune, I remember, was "The Lambeth Walk".

Left on our own, Uncle Lachlan and I went across to Spike. He was on his knees by the atomic hatch, using a spanner and a long piece of wire. His hands were stained and dirty.

Kneeling beside him, my uncle said: "Lars tells me you haven't had much success."

He looked up, and to my surprise his grime-streaked face was white and drawn. "You did better than we did. You found the iridonium," he answered.

"Yes—and something else besides. But tell me—what are your ideas about the motor?"

He put down his tools and leaned back, one shoulder propped against the switch panel. "I—I dunno," he said.

- "You look tired."
- "Yeah, I feel tired."
- "Something on your mind?"

SPIKE'S CONFESSION

"I guess there is."

Uncle Lachlan took off his spectacles and began to polish them. "I'd like to hear about it."

But Spike failed to respond. "I'd rather I told you alone," he said, glancing in my direction.

"If it's something serious Jeremy will have to know sooner or later," returned Uncle Lachlan. He put on his spectacles again and lit a cigarette.

Spike hesitated, then made a sudden gesture with his hands. "Okay—I'll come clean. We've discovered what the original trouble was. Before we landed the oil-gland in the switch-gear completely disintegrated."

Uncle Lachlan nodded. "Well—haven't you a spare?"

"Sure. But that's not the point. See here." Picking up an inspection-lamp, he leaned forward and directed its beam into the cavity in the floor. We knelt behind him. "When the accident took place," he went on, "the oil-gland broke into a thousand pieces. The metal flew out at terrific speed and became embedded in the atomic screen there, making it quite useless."

"I see," replied Uncle Lachlan, gravely. "And Jeremy and I used the spare screen back at Inverard."

"That's it." Spike withdrew the inspection-lamp and switched it off. A bead of perspiration glistened on his forehead. "There's no chemical reaction this time. But without a spare screen—well, I guess the atomic motor won't function again."

It was silent inside the ship, and the air seemed heavy. Uncle Lachlan tapped his eigarette, and the smoke rising from it jerked and trembled.

He said: "But that means-"

"I'm trying to tell you what it means!" The interruption came with harsh intensity. "I'm trying

to tell you that Spike Stranahan, your brilliant engineer, has let you down. His work was rotten—rotten to the core!"

"No, that's not true."

But Spike would accept no comfort. "That oilgland was a bad design!" His voice rose, and he gripped the inspection-lamp so tightly that his knuckles gleamed. "I spent my time arguing. I thought I could teach you—you and Professor Bergman. But don't you see? Don't you see what it means? Because of Spike Stranahan we're grounded here—grounded here on Hesikos for the rest of our lives!"

$THE \ SECRET$ $OF \ THE \ FLOWER$

TT WAS SEVERAL days before Spike recovered his confidence and good spirits.

I noticed that the one who had most influence on him was Janet. When she was beside him he always looked happier and more at ease, and it seemed to be the same with her. Back at Inverard I might have been jealous, for I had always looked on Janet as my particular friend. Here, however, such an idea just didn't occur to me.

Strangely enough, with the possible exception of Spike, none of us was too gravely concerned about the future. We ought to have been appalled and terrified at being marooned on Hesikos; but though moments of depression did come to us, generally speaking we were content to let the days go by, trusting that our problem would resolve itself.

For this attitude Uncle Lachlan's cheerful optimism was in part responsible. He seemed sure that Spike would eventually discover a method of repairing the motor and encouraged him to try picking the shattered metal from the screen, piece by tiny piece. Even when the experiment proved a failure he refused to admit anxiety.

"Keep going, Spike," he'd say. "You'll find the answer yet."

Never for a moment did he allow us time to brood. Our first big job was to refold the parachute and repack it in the nose of the ship. Afterwards he planned a full programme for each day, and we were kept busy exploring the oddly-shaped countryside and bringing back photographs and notes for Professor Bergman, who was making a detailed record of our discoveries.

But most of all, I think, it was a power in Hesikos itself that gave us courage. We all experienced it to a greater or lesser degree. In moments of doubt it would come to us, calming us and making us feel that in spite of what had taken place—in spite of the fact that the ship's reserve batteries were running lower every day—an influence for good was working on our behalf.

As far as I was concerned, we found nothing particularly exciting during our tours of the surrounding country. It was a deserted area, so quiet and still that it seemed to be waiting breathlessly for something to happen; but no evidence was forthcoming to suggest that life resembling our own existed anywhere. There were smooth rivers and valleys and different kinds of trees and fruit; there were sharp little knolls and pointed hills, but no signs at all of anything aftificial.

My uncle and Professor Bergman, however, were enthusiastic about the mineral and plant specimens which we collected for them; and in the evenings, while we sat at supper, they would entertain us with their theories regarding Hesikos, which, according to the mute witness of geology, was several million years older than the Earth. We had landed, they explained,

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in what might be called the northern hemisphere of the planet, and this accounted for the nine-hour day. They believed that farther south we might find more luxuriant vegetation and perhaps some kind of animal life, but naturally they couldn't be sure.

Optimistic as usual, Uncle Lachlan said that on our next journey from the Earth we should have to bring a jeep as part of our equipment in order to explore farther afield. As it was, we never ventured more than about ten miles in any direction, in case we might be caught in the dark and lose our way.

In Professor Bergman's opinion Hesikos was a dying world, from which animal life at any rate had almost entirely disappeared. He encouraged us to search for fossils to prove his theory; but more than a week went past without us coming across anything of the kind.

On one occasion, however, I unearthed an oddly-shaped piece of shining iridonium. It was in the form of a ring with a diameter of about three inches, and Uncle Lachlan and the Professor pored over it for a long time. But though Janet and I kept asking questions about it, we got no satisfaction. Neither of them would admit that it was anything but an unimportant freak of nature.

They also seemed reluctant to give us a reason for the quick growth of the plants and trees, though once I overheard the Professor telling Spike that the structure of the mosses in particular pointed to an unusually severe winter in this part of Hesikos.

As time passed and the motor still remained dead and silent, Madge helped Uncle Lachlan to keep our spirits up. She spent most of her time preparing our food and keeping the ship tidy, and planning how best

to economise in the use of electricity. Generally she made our coffee on fires of dried moss on the ground and served us with cold tinned meat, reserving her stove for extra special occasions. Despite the circumstances, however, she was always bright and cheerful, often making us laugh with her quaint expressions.

I remember one afternoon, eight days after we landed, she and Professor Bergman and I were sitting by the lake. She and I had come for water, and the Professor—tired of swotting, I expect—had decided to come with us. Uncle Lachlan, Janet and Spike were looking for fossils in Rocky Valley.

I had been speaking rather anxiously about Spike's efforts to repair the motor, while the Professor nodded his head in sombre silence; but Madge, forthright and sharp as usual, would have none of our pessimism.

"Wot I say is, no good worrying about tomorrow—or the day after tomorrow. Wot will be, will be—that's my motto."

Professor Bergman smiled. "You are a philosopher, dear Madge!"

"Go on! It's just plain common sense. We're quite safe 'ere. There's enough food to last us for months and plenty of water. Wot's more, we're all 'appy and agreeable for once."

"That's what puzzles me," I said.

. The Professor leant sideways and picked a root of the small white flower which grew everywhere in such profusion. "I have been studying this plant," he told us "and have come to the conclusion that its perfume may have an effect on us."

Madge nodded. "I shouldn't be surprised. The scent is all over the place—and wot else could 'ave changed Dr. McKinnon and Mr. Stranahan? They're not

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angry or contrary any more, but kind and gentle."

"Perhaps they have always been gentle, underneath. It required something—a spiritual influence, perhaps, materialised in the perfume of the flower to conquer the evil and bring good to the surface."

"I dunno," she returned, doubtfully. "Anyway, it's queer."

I suggested that we should give the plant a name.

"I've already done that, in my imagination like." Her voice grew soft. "I call it Charity."

It was a perfect name, I thought; and Professor Bergman seemed to agree with me.

"Charity," he repeated, slowly. "Yes—so appropriate." He held out the plant on the palm of his hand. "See how its leaves and petals incline upwards, like the points of a star."

Madge examined it, her head to one side. "Its root is far longer than you'd think," she said, presently. "For such a small flower, I mean."

He hesitated, glancing at me as if in doubt. Then with a shrug of his heavy shoulders he turned again to the housekeeper. I wondered if at last he had made up his mind to be frank about conditions on Hesikos.

"Its root is long," he returned, quietly. "That is not surprising when you consider that each winter it is covered deep in ice and snow. Outwardly it dies, but in the warm soil beneath the surface the root lives on; and when the sunshine comes in summer and the ice melts, it grows quickly again to full maturity."

I was beginning to understand. I said: "This ice and snow you speak about, when do they come? Is the summer nearly past now?"

He looked uneasy. "I have made a calculation," he replied, picking his words. "It appears that the

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winter of Hesikos comes fairly quickly, creeping down from the polar regions like the fingers of a great white hand. It will be on us, I think, in another week. Sooner perhaps. You will have noticed in the past day or two how the arc of the sun has been sinking lower and lower to the horizon?"

- "Yes-and much quicker than it does on Earth."
- "That is so. But we cannot compare Hesikos with the Earth, Jeremy. On account of its smaller size and the rate of spin about its axis, its days and nights are much shorter, as you know. Particularly in this area. It is the same with the seasons. As Hesikos turns in space one side basks in the sun—as is happening here now—while the other is cold and dark. There is no real spring or autumn. Just alternate summer and winter, every three or four months."

Madge wrinkled her nose. "Makes me shiver just to think of it! I expect the winters are pretty cold?" she added.

"Very cold, dear Madge. Colder than anything we can imagine on Earth. . . . But we shall be safe in the ship, for a time at least—if the batteries last out and the heaters can be used."

SWIRLING MIST

For some time after the Professor had spoken, he and Madge and I sat there by the side of the lake, saying nothing.

The day was calm and silent, just as it always seemed to be on Hesikos. The surface of the water in front resembled a sheet of glass, and the grove of trees was reflected by it in sharp detail. The sun was low at our backs, and it suddenly occurred to me that the air might be colder than usual.

I shivered and was about to suggest to the others that we ought to return to the ship, when all at once, a quarter of a mile away, I saw Uncle Lachlan racing towards us along the bank of the stream. He was hatless, and his brown Harris tweed jacket flapped loose and open as he ran. The sunlight glinted on his untidy red hair and flashed from his spectacles.

He was coming from the direction of Rocky Valley, and as the most direct route from there to the ship lay through a glen about a mile to our left, I knew immediately that something must be wrong. We got up and skirted the lake to meet him.

Twenty yards away he stopped running and walked towards us, breathing hard. "We must hurry to the ship!" he exclaimed. "We spotted you sitting here, so I told Janet and Spike to make their way home through the glen and came to warn you myself."

- "But why, Uncle Lachlan? What is it?"
- "Haven't you noticed?" He turned and pointed to the north. "The mist yonder, behind the hills."
 - "Cor, lumme, you're right!" breathed Madge.

I understood now why I had felt the cold. Shaped like a huge thundercloud, but greyish white in colour, a mass of mist was rolling higher and higher above the pointed hills, constantly moving and swirling within itself. Like the smoke from a forest fire it was sweeping towards us at tremendous speed.

"We noticed it first when we were climbing up through the corrie," said Uncle Lachlan, recovering his breath. "Come on—there's no time to waste!"

We started to run for the ship, which pointed a rusty red nose to the sky more than a mile away. Professor Bergman and Uncle Lachlan and I could have gone much faster, but we had to wait for Madge. We made a detour round the trees, then bore left to within a few hundred yards of the edge of the cliff.

Second by second the air grew colder. When I glanced back I saw that the hills had been blotted out and that the mist was rolling down across the plain, only a mile or two behind.

- "Blimey, I ain't built for speed!" panted Madge. "This is 'orrible."
- "You're doing fine," Uncle Lachlan encouraged her.
 - "Wot 'appens if the mist catches up on us?"
- "I'm not sure. But it's bound to be very cold, and we might easily get lost in it. We'll be all right inside the ship, though, with the main hatch closed."

It was like a nightmare. No matter how fast we moved, we seemed to get no nearer the ship. The sun blazed in our eyes, drying the sweat on our faces. For

SWIRLING MIST

his bulk Professor Bergman was surprisingly light on his feet and did a lot to help Madge. More than once she would have fallen had it not been for the support of his strong arm.

As we began to leave the vicinity of the cliff I glanced back again. The mist was now much closer, an opaque white wall bearing down on us from a great height. I saw it rolling on over the lake and the trees, snatching them from sight in a matter of seconds.

- "What is it?" I said. "I mean—"
- "You might call it the first breath of winter," returned Uncle Lachlan, jerking the words out as he ran. "I was expecting it—but not so soon. A cloud of mist formed in the polar regions by cold air mixing with the warmer air here."

Professor Bergman assisted Madge across a narrow ridge of pink rock. He said: "Like your breath on a frosty day, Jeremy—made up of small cold drops of moisture. It is simply a warning. In an hour or two it will pass, and the atmosphere will be as warm and pleasant as before."

But there was small comfort in thinking about the future. It was the present that concerned us. Almost as soon as he had finished speaking we heard the wind, wailing at our heels as the damp mist rushed through the air.

The sound was closing in on us. I looked over my shoulder. The menacing white cloud was only a few hundred yards away, and I knew at last that we could never reach the ship in time.

"Whatever happens," said my uncle, "we must keep together."

Then suddenly, sweeping down in a clammy wave, it was on us, chilling us to the bone. It whined like the

breath of evil, so thick that we could scarcely see one another. I had never experienced such cold in my life. Madge, who was wearing only a thin summer frock, must have felt it even worse.

As the mist engulfed us we had stopped running. Now Uncle Lachlan's voice came like a ghost's. " Move

on. It's the only way to keep warm."

We made an effort to run again, but since we could see nothing in front we were soon stumbling and slipping on unexpected rocks and had to slow down to a walk. My teeth were chattering. The mist penetrated my clothes and touched my body with freezing fingers.

The cloud became thicker, and an instinct of danger entered my mind. I tried to recognise the moss and the patches of white flowers beneath our feet, but it was impossible.

I said: "Do you think we're going in the right direction?"

"I don't know." Uncle Lachlan spoke thickly through his teeth. "Before the mist came down I thought I had fixed the position of the ship. But now—I am not sure. I—I hope Janet and Spike got back in time." And then as I tripped and fell across a hidden boulder, he added: "Take care, Jeremy. Not so quickly. I am afraid of the cliff."

I was also afraid of the cliff. A few minutes before it hadn't been far to our left. But my physical discomfort was so great that I tended to ignore not only his warning but also my own instinct of danger.

As we struggled on in the wind and the perishing cold, Madge crossed her thin arms on her chest, stifling a sob of weakness. Hearing her, Professor Bergman pulled off his black jacket.

SWIRLING MIST

"Take it," he said, impulsively. "I am more used to the cold."

She tried to protest, but he leaned sideways and wrapped it firmly about her shoulders.

"You-you are kind," she whispered.

We were so chilled and blinded that I, for one, scarcely knew what I was doing. I wanted to lie down and go to sleep and forget about it all; but having read about Antarctic explorers who had felt a similar sensation before being overcome by a blizzard, I gritted my teeth and went on.

By now we had linked arms, so as not to lose one another. Professor Bergman was on the right, then Madge, then Uncle Lachlan. I was on the left. But in the whirling storm of mist we had lost all sense of direction and had no idea where we were going.

Suddenly, without warning, a piece of loose turf broke away beneath my feet. I glimpsed a yawning emptiness below and with a stab of fear realised that I had stepped blindly over the edge of the cliff. I felt myself falling.

But my uncle's arm was linked in mine, and that saved me. In a split second he had jerked me back on to firm ground.

"It's the precipice!" I gasped out, leaning against him and feeling sick.

"I know." His voice was harsh with anxiety. "Bear right!" he exclaimed. "Bear right quickly. We must keep warm. . . ."

But the mist and the wailing wind were battling against our will-power. I tried to obey Uncle Lachlan, but my feet were like lumps of iron. Soon I came to a dead stop, and at the same moment Madge sank down on her knees and began to cry.

Panic came to us. Professor Bergman lifted his arms and swung them about as if trying desperately to beat back the mist. Even my uncle cried out: "This is awful—this cold. . . ."

And then, quite suddenly, we were not afraid.

New life came to us. Madge got to her feet. My tiredness left me, and I looked up and saw that Uncle Lachlan and Professor Bergman were no longer in distress. Though the mist was as thick as ever, we seemed in a moment to have acquired resistance to the bitter cold.

Then we saw at our feet a shining path of flowers. Above it the mist thinned and divided, with rays of sunlight slanting through.

"I remember now," said Professor Bergman, quietly. "There is a broad avenue of flowers running straight between the precipice and the ship. If we follow it we cannot be lost."

We followed it. In five minutes we had reached the ship.

THE CAVE BENEATH THE CLIFF

JANET AND SPIKE, who had got back just before the mist overtook them, were so relieved to see us that they could hardly speak. They had been preparing to go out to try and find us, and our sudden appearance on the path of flowers had been like a miracle. But as we climbed into the ship, closing the main hatch and adjusting the air-pressure system, Janet pulled herself together.

"You poor souls!" she exclaimed. "You're starving and soaking wet. Sit down and I'll get you some hot drinks. Put on the heaters, Spike."

He did as he was told, and as she went off to the kitchen the rest of us huddled round the two electric fires. Their warm glow soon began to take the chill from our bones.

"How long d'you reckon it will last?" said Spike, a line of worry on his forehead. "This fog, I mean?"

"Only an hour or two," replied Uncle Lachlan and went on to explain the phenomenon in technical language. Then he spread his hands above the heaters and grinned. "This certainly feels a lot better than out there! What do you say, Madge?"

She nodded, the old twinkle returning to her eyes. "It reminds me of when we was kids. On a stormy wet

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night my mother would draw the blinds and make us sit around the fire. Then she'd say: 'Well, that's us all inside, nice and comfy. Pity a pore sailor on a night like this!'"

We smiled, and Professor Bergman said: "I think you must be very like your mother."

But she denied it. "My mother 'ad far more common sense. She'd never 'ave gone sailing away on a spaceship. I took that from my father. 'E was the pore sailor she was thinking of!"

When Janet came at last with a brew of steaming hot cocoa we were talking and laughing as if we hadn't a care in the world.

The mist soon cleared, and Hesikos was as warm and peaceful as before. But the days went on and there was no sign of the motor coming to life again. The batteries were running short of current, and we all knew now that an icy winter would soon be on us.

I could see that the problem was beginning to worry my uncle more and more. For a time I think he considered the idea of trying to repair the radio, which had been put out of action in the crash-landing, to see if we could get in touch with Jock Ferguson back at Inverard. But on a first examination the instrument appeared to be hopelessly damaged; and in any case, sober reflection soon showed that the scheme was pointless. Only another spaceship could rescue us, and the only other spaceship on Earth belonged to Hermanoff. It didn't seem likely that Jock Ferguson could persuade our enemy to sacrifice his own plans on our behalf, even if the European's ship was ready to fly—in itself a doubtful proposition. In addition, winter would arrive in a matter of days, and under the best possible conditions there was little

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hope that a rescue ship from Earth would be able to reach us in time. There was also the consideration that a bout of signalling to the Earth would use up a great deal of our precious electricity supply. The radio, therefore, was left untouched, and Uncle Lachlan made it clear that our safety must depend entirely on ourselves.

One evening, as we waited for our supper, he and Professor Bergman and I were resting on the ground below the ship. The men were smoking, seated on a smooth rock, while I lay on my tummy idly shredding a piece of moss. The sun was hanging like a fireball above the horizon.

For some time we had been silent, listening to the sounds that went on inside the ship—the patter of Janet's feet as she bustled about laying the table; Madge's voice humming "The Lambeth Walk" in the kitchen; the slow, uneasy tap of Spike's hammer as he doggedly continued to work on the atomic screen.

Suddenly, abruptly, Uncle Lachlan said: "I can think of only one solution, Lars. We must find a cave."

Professor Bergman looked up. "You mean, to protect us from the cold?"

"Yes. Or at least from the worst of it."

With my usual tactlessness I remarked that we hadn't seen a single cave all the time we'd been on Hesikos.

Uncle Lachlan agreed. "At the same time," he went on, "I feel there could be one in those hills—yonder to the south. That kind of pointed, jagged formation suggests underground passages."

"I think you are right," said the Professor, in his sober way.

Uncle Lachlan continued: "If we did happen to be lucky, we could cut down some of the trees and build fires. The wood would be sappy, I know, but it could be dried out before use. Of course," he added, "to suit our purpose the cave would have to be very deep."

I looked across the quiet green country towards the irregular line of hills in the distance. The red disc of the sun was going down behind them, and one black tooth seemed to be biting into it.

"We'd take a whole day to get there," I said.

"Quite true. And we might be caught in another cloud of mist." Uncle Lachlan threw away the stub of his cigarette. "But we must risk it. We'll take warm clothes and set out first thing to-morrow."

Later on in the evening it was decided that he and Spike and I should go, Professor Bergman reluctantly conceding that it was his duty to remain behind with the ladies and continue work on his notebooks. I went to bed afterwards and slept better than I had done for some time.

Next day, in the chilly dawn, the three of us put food and thick clothing into our packs and set off towards the distant range of hills, promising Janet and Madge and the Professor that we'd try to be back the following afternoon. For seven hours we tramped steadily over the rolling mounds of moss. Most of the streams we were able to jump, but if they were too wide we took off our light tropical clothes and swam for it, holding our packs above our heads. The water was only slightly cold and refreshed rather than tired us.

Once we came on another deep gorge like Rocky Valley, and for some time we searched unsuccessfully

THE CAVE BENEATH THE CLIFF

for a way to the other side. In the end, however, we spotted a rift in the rock formation. Crossing the gorge at right angles, this gave us a fairly easy passage.

It was here that Uncle Lachlan found our first fossil—a fragment of grey rock bearing the spiral-shaped imprint of a trilobite—the small sea animal which, on Earth, was a common ancestor of all living creatures. He picked it up and put it in his pocket without saying much, but I could see he was excited. As far as Spike and I were concerned, the astonishing implications of his discovery didn't occur to us at the time. All our energies, mental and physical, were concentrated on reaching the hills and finding a cave to shelter us.

When we did arrive at our objective, two hours before sunset, we immediately began to look for an opening in the rocks. But though we skirted the ridge for almost four miles, climbing among screes and precipices, we found nothing. The place was silent, bare and inscrutable, like the face of the Sphinx; and as darkness fell and we ate our meal and finally lay down in our blankets under a small flowering tree, I was uneasy and pessimistic. Uncle Lachlan and Spike did their best to talk naturally; but I knew they were also feeling the strain.

That night I dreamt of Australia and the sunny, populous beaches of Sydney; and when I woke in the half-light, with silence again pressing down on us, I wondered why I had been so eager to join the crew of Uncle Lachlan's ship.

When the sun rose we looked back towards the northern hills for any sign of the white mist. But the air in that direction was as clear as ever. To my

imagination, however, the countryside had changed since our landing. At that time it had been gay with colour. Now, though the air was still warm and sunny, it seemed to have become lonely and quiet and sad, as if waiting for catastrophe. Almost imperceptibly its colour was being drained away.

I had a feeling that our expedition was going to prove a failure. But as it happened we had been searching for only half-an-hour after breakfast when we found a cave. As we stood there, looking in, a thrill of new optimism came to me.

Burrowing under an overhanging cliff, its mouth was over twelve feet high and about ten wide. The floor sloped downwards into the dark, a floor of bare greyish-pink stone like that in the precipice at Rocky Valley. Momentarily it occurred to me that this could be a place where plentiful supplies of iridonium might be found.

The high tunnel had clearly been formed not by the action of water but by a fault in the rock itself. As we went in I think we all said a prayer to ourselves. Spike took the lead with his torch, while my uncle and I tramped on behind him. The downward slope continued, and after we had been walking for three or four minutes, I began to feel the atmosphere growing warmer.

"There's no sign of it coming to an end yet," I said.

"I know." Uncle Lachlan's voice echoed quietly in the roof. "But we've only gone about a hundred yards. It will have to stretch in for at least half-a-mile before we can call it a proper refuge."

Spike glanced back. "You mean the winter cold will penetrate all that distance?"

THE CAVE BENEATH THE CLIFF

"I'm afraid so. Even hig fires between us and the cave-mouth would make very little difference."

But the cave went on, maintaining its height and breadth. There was no maisture on the walls, and the air kept fairly fresh. It was easy to walk on the smooth stone of the floor.

We had gone in for about three hundred yards, perhaps, when I broke a long silence. "I've been thinking, Uncle Lachlan. There's rothing living on Hesikos. Except the plants, of course. Why is that?"

He hesitated. At last he said: "I'd better tell you, Jeremy. When Professor Bergman and I made our observations on Earth, we found that the atmosphere of Hesikos contained oxygen, nitrogen and carbon dioxide, the necessities of life for animals and plants. What we failed to discover was that deadly cold sweeps over this part of Hesikos every three months. Only plants and trees with deep roots—and the power of quick growth—can hope to live. No form of animal life has a chance of survival, on the surface at any rate."

Instinctively I had known all this; but now I was compelled to face the truth. We were in the utmost danger. If we found no suitable refuge within the next few days we should have to stay in the ship. And when the batteries ran down and the heaters failed to work...

Spike interrupted my frightened thoughts. "D'you think Hesikos was always like this?" he asked.

"I don't know," confessed Uncle Lachlan. "But its course in space has kept changing. At one time, when it circled nearer the sun, its winter may have been a lot milder."

As we went deeper and deeper, the ray from Spike's torch played on the sombre walls, picking out points

of radiance like eyes in the dark. I guessed they were nuggets of iridonium, which, even in the daylight, glowed with a kind of phosphorescence. It was queer to think of it. We'd all be millionaires ten times over—if only we could get the stuff back to Earth.

Quite suddenly, when we had gone about a quarter of a mile underground, the cave narrowed; and with a feeling of numb disappointment I saw the torchlight reflected on a solid wall in front.

We stopped. For a time we didn't speak. Then Uncle Lachlan, who was between us, put his hands on Spike's shoulder and mine.

"Pity," he said, and his voice was carefully controlled. "We've drawn blank, I'm afraid. We might exist here for a time, but the cold would reach us long before the winter was past."

"But surely—I mean, there may be other caves," I blurted out.

He squeezed my shoulder. "We'll go on searching, of course. . ."

Presently the light from Spike's torch dropped to the foot of the bare wall. He stiffened.

"Say-look over there!" he muttered.

At first I thought it was a pile of loose sticks; but when we went forward and examined them more closely I discovered that this was not the case.

"They-they look like bones," I ventured.

"They are bones," returned Uncle Lachlan, quietly.

Spike drew in his breath. "Then there may be animal life on Hesikos after all?"

"It doesn't follow. Wait. Hold your torch steady."
There was a heap of them, dry and brittle, like broken skeletons. I bent down and touched one on the

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top, and the whole pile cringed into itself with a powdery rustle.

Spike said: "But Doctor, what does it mean?"

"I'm not sure," replied Uncle Lachlan. "But these bones have probably been lying here for centuries—preserved by the dry air."

Among the pile I saw something which shone like silver. I picked it up and found it was a necklace, made of a metal alloy in which iridonium was almost certainly one of the basic components.

Uncle Lachlan took it and held it on the palm of his hand. At last he said: "It must have been an ornament, worn by one of the people who died."

- "People?" I asked, quickly.
- "Yes. Though perhaps not people like us."
- "But how-"

"Wait." His voice cut across mine, betraying a sharp new quality of excitement. "I think I know the answer. Thousands of years ago, when the climate was more temperate, living creatures existed on Hesikos. Some of them were thinking creatures, with a soul like ourselves, and a love of adornment like ourselves. Then the seasons began to change. Hesikos withdrew farther and farther from the sun, and the winters in this part became desperately cold. Year by year the people died, until at last only a few were left—a few who tried to shelter from the ice and snow in caves like this. Then the cold became worse. There were no more caves deep enough—and the last of the few perished, huddled here against an inner wall."

After a while Spike said: "I wonder if that's true?"

But as he spoke we knew that it must be true. There could be no other explanation.

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Twas obvious that we should find no other underground passage deep enough for our needs, in this part of the planet at any rate, because if there was one, the people of Hesikos would still be living on. As we trudged back up the slope Spike began to blame himself again for the accident to the ship's motor; but Uncle Lachlan soothed him and persuaded him to forget about it.

"Don't give up hope yet," he said, earnestly. "We may still have a chance, inside the ship."

I was glad to see the sun again after the blackness of the cave. The dark had got me down a bit. And after we had gone about fifteen miles on our way back to rejoin the others, the sunshine and the exercise had begun to make me feel considerably better.

In the afternoon, when we were only five miles from the ship and we could see it in the distance as a small red blot on the green and white landscape, we sat beneath a tree-clad knoll to rest and have a drink from our water-bottles. The sun was sinking behind a high, rocky hill to our left, but ninety minutes of daylight still remained and we had plenty of time.

"Look, Doctor," said Spike, abruptly. "This knowledge, this influence that comes to us, has it something to do with the white flower—Charity, as Madge calls it?"

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"I can't tell you." Uncle Lachlan leaned back against the mossy bank, and there was a puzzled look in his eyes. "I am a scientist," he continued. "Once upon a time, on Earth, I assumed that every form of knowledge stemmed from Science. Now I know that my assumption was wrong. Science is only a clue to a deeper mystery—the mystery of the human spirit. You remember, Jeremy, what I told you once—that where Science is concerned the individual doesn't count?"

"Yes. I remember."

"I was wrong," he said. "It is the individual—the spirit of the individual—that counts. Not Science. The influence of Hesikos, the scent of the white flowers—as a scientist I cannot explain them. But they have a meaning. I think they are trying to tell us that scientific knowledge is not the final answer; that more important still is knowledge of the human spirit, which is permanent and indestructible."

I tried to understand his argument, though at the time it was difficult. Then I noticed that Spike was looking at him in an odd kind of way.

Quietly he said: "You've changed, Doctor."
My uncle nodded. "We have all changed. But—"

He stopped abruptly as a murmur of talk came from behind the knoll. To begin with I could scarcely believe my ears. Then it became apparent that there were two voices, and I wondered if perhaps Janet and the Professor had come to search for us. But after a second or two we looked at one another in startled astonishment. The voices belonged to two men.

We stood up and listened. So far we had been unable to distinguish individual words; but as the speakers, still hidden, approached us round the

knoll, it came to me with a further shock of surpris that they were talking in English—broken and guttural, but recognisable all the same.

One of them said: "It was in this direction, I think, that our radar picked up what may be their ship?"

"Yes," returned his companion. "An object of steel—I am sure of that. Perhaps we may see something beyond the trees."

Then I knew. "It's Hermanoff!" I said, in a low voice. "Hermanoff—and someone else."

Spike nodded. "I guess you're right, son. He's made it after all."

Uncle Lachlan's expression was a strange mixture of uncertainty and triumph. "Wait—they've stopped," he said. "We have time to consider."

The two men remained out of sight behind the knoll. As we stood there, undecided what to do, thoughts went through my mind like quick-silver.

I remembered the day back at Inverard when Hermanoff had come to see us. I remembered listening to his cold, hard voice. "I have discovered a practical formula for combining lead and iridonium to produce gold. You have not. That is my bargaining point." And then, after my uncle had refused to accept his terms, his loud and terrible anger. "You are fools! Blind fools! You think my ship is not ready? Let me tell you this—I will land on Hesikos close behind you. And then—I warn you, Dr. McKinnon—then you will all cringe at my feet, begging for mercy. . . ."

After a few moments Uncle Lachlan said, quietly: "We'll go and speak to them."

He led the way, and we saw the others before they

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saw us. They were standing together, smoking small black cheroots and studying figures in a notebook. I thought Hermanoff's black beard was bushier than before, but he still wore a plain dark suit, and his skin was as sallow and dry as ever. His companion was a taller, more powerfully built man, with oddly slanting eyes and a long, clean-shaven chin. He wore a khaki shirt and shorts and looked like a heavy-weight boxer.

"Are you looking for our ship?" asked Uncle Lachlan.

They wheeled round. For a few seconds we stared at one another. Then Hermanoff smiled and came towards us.

"Ah—Dr. McKinnon! I am happy to find you. We were sure our bearings were correct."

They shook hands, and before I quite knew what was happening Hermanoff was shaking hands with Spike and me as well, and introducing his burly engineer assistant, whose name was Andrieff.

"How long have you been on Hesikos?" asked Uncle Lachlan.

"About a week."

In his deep, bass voice Andrieff went into more detail. "Six days ago we come. We land beyond that hill, four miles from here." He pointed towards the rocky peak on our left.

"And in that time," supplemented Hermanoff, "we have discovered many things. For instance, iridonium."

"And about the seasons?"

"Yes. And that living people existed here long ago, only to die in the frozen dark."

Behind his spectacles Hermanoff's eyes were no

longer hard and calculating. Andrieff, too, had an air of friendliness.

Uncle Lachlan said: "Do you remember that day in Scotland when you called us fools? You were right, you know. And now your prophecy has come true. We are begging you, if not for mercy, at least for assistance."

The other looked surprised. "But I do not understand! You have your ship. Our radar told us it was here. Andrieff and I were about to pay you a visit."

"We have our ship, of course. But the motor is permanently damaged."

"I see. You wish us to take you back to Earth, before the winter?"

"Yes."

Hermanoff did not answer at once, and a slight frown creased his forehead. I caught myself holding my breath.

Spike put in: "It's a lot to ask of you, Professor."

And my uncle added quickly: "My main anxiety is that Jeremy here—and my secretary and house-keeper—should be given a chance. They did nothing to harm you."

But Hermanoff spread his hands. "My dear Dr. McKinnon, my worry is not on that account. You shall all have a chance. We are the same—the same flesh and blood. Surely it is our duty to return to the Earth together and tell people everywhere what we have learned on Hesikos. Some day, perhaps, young Jeremy here will see the result of our discoveries."

Spike flushed and bit his lower lip. My own relief was intense, and I knew that Uncle Lachlan felt the same. For a time he was silent, his untidy red hair and gaunt appearance contrasting oddly with the

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dark, well-nourished primness of the two Europeans.

At last he said: "How can I thank you, Hermanoff?"

But Hermanoff smiled and quickly changed the "ubject. "May I go with you now to your ship?" he asked.

"Yes. Yes, of course. Lars and the ladies will be overjoyed. You must stay the night, so that we can discuss details."

It was arranged that Hermanoff should accompany Uncle Lachlan and me, while Andrieff, with Spike to give practical assistance and keep him company, returned to his own ship to make preparations for departure.

"When shall we see you again?" asked Spike, as we got ready to go.

Hermanoff fingered his beard. "Tomorrow, I think."

- "And the take-off for Earth?"
- "Immediately we arrive. The sooner we leave Hesikos the better. Don't you agree, Dr. McKinnon?"
- "Yes. Winter will come suddenly, if the position of the sun is any guide."
- "Then tomorrow is the day. Feed Mr. Stranahan well, Andrieff. We have plenty of rations."

Andrieff chuckled. "I think we shall open a tin of caviare."

"Sounds wonderful!" grinned Spike, as they left us.

Hermanoff had been walking with Uncle Lachlan and me for only a short distance when he said abruptly: "Jeremy—you have been very quiet. Is anything the matter?"

"No. Nothing's the matter. But I've just been

wondering—will there be room in your ship for us all?"

Again the anxious crease lined his forehead. "That has occurred to me, too, my boy. But," he added, as if loath to pursue the subject, "we shall see."

A PROBLEM OF MECHANICS

THAT NIGHT, when I went to bed, sleep refused to come. In a short time now we should be on our way back to Earth, and excitement was burning inside me like a fire. I kept thinking of the heather hills of Scotland and wishing I was back among them already.

As I lay there, wakeful and alert behind the curtains, I could hear Hermanoff and Professor Bergman talking together. Uncle Lachlan and Madge and Janet had gone to their rooms fairly early, but the two Europeans sat on for hours in the main compartment, eagerly exchanging scientific data.

Their voices came to me in a constant murmur.

"Yes, the figures are nearly the same." Professor Bergman rustled a sheaf of papers. "Our escape velocity worked out at eleven point one kilometres per second."

Hermanoff struck a match, and I felt the acrid odour of one of his cheroots. "It is extraordinary. Our calculations must have been almost identical. Though I admit again that Oppenheim helped me with the design of the atomic motor."

"Let us forget the past, my friend. What we are concerned with now is the future of space travel. Your ship is smaller than ours, you say?"

- "Much smaller. Andrieff and I came alone."
- "There is another point. Did you encounter obstacles of any kind on your journey?"
- "Nothing. It was as uneventful as a flight from Berlin to London."
- "We had the misfortune to run into a shower of meteors—very small, of course. But we had to use our motor at full power to avoid them. I think that was the principal cause of its breakdown."
- "It is possible. We were more lucky. We landed safely and are ready at any moment to take off again."
 - "You will take a load of iridonium?"
- "Not a heavy load. With so many people the lifting capacity of my jets will be strained to the utmost, and human lives are more important than iridonium. Perhaps a small quantity, for the purpose of experiment."

After a pause and more rustling of paper Professor Bergman said: "You know, I have never yet discovered the formula for combining it with lead to produce gold."

Hermanoff chuckled. "The secret is simple. The catalyst is chloride of sodium. In other words, common salt."

- "No! It is impossible!"
- "It is true—if my calculations are correct. But we shall conduct an experiment together on our return to Earth. One ton of lead, half-an-ounce of iridonium and ten pounds of salt, heated to a temperature of about three hundred degrees centigrade."

Professor Bergman sighed. "I was trying to be too clever. The idea of salt never entered my head."

"It was a mere chance that I discovered it. But no

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matter. Tell me, did your rotatory jets work successfully?"

"Most successfully. Dr. McKinnon and I had calculated the rate of spin necessary beforehand, and in ractice they worked exactly as we had foreseen."

"And your air-pressure system?"

"That was based on the latest research by American rocket scientists. We used the basic formula employed during their experiments with monkeys and mice. You remember?"

"Yes, of course."

Their conversation went on, detailed and persistent, until at last, when they started to discuss the subject of spacial navigation and to calculate the exact second we should require to take off the following day in order to land at Inverard in daylight, my mind grew tired and I fell asleep. The next thing I knew was Madge shaking me and announcing that breakfast was ready.

After the meal we collected our few belongings, together with the charts and notebooks and photographs, and set off to walk the eight miles to Hermanoff's spaceship. The morning was clear and sunny, but as soon as we left the ship I noticed that the air was chillier than usual. Loking back towards the north, however, I could see no sign of mist on the hills.

In a way we were sorry to say good-bye to the great steel cylinder that had been our home for the past few weeks. But the wonderful prospect of returning to Earth soon chased sentimental thoughts from our minds.

Our route lay through a continuation of the glen which ran between Rocky Valley and our ship, and

we found no natural hazards in the way. The turf below our feet was smooth and soft, and only occasionally did we have to cross ridges of bare stone. The white flowers were everywhere in evidence; but on this occasion I noticed a curious thing. Their longnarrow petals were beginning to close in on one another, as if they knew that their short life above the ground was coming to an end.

Madge walked briskly in front with Uncle Lachlan, Professor Bergman and Hermanoff, while Janet and I lagged twenty yards behind. As we drew nearer the rocky hill behind which the other spaceship had landed, Janet was in a happy mood.

"Remember, Jeremy, that day we met Hermanoff at Oban Station? He's quite different now. In spite of his black beaver I'm beginning to like him!"

"So am I. And wait till you meet Andrieff. He's huge and gruff—like a polar bear—yet you can't help being fond of him. And what a voice! Just right for the 'Volga Boatmen'!"

She laughed, linking her arm in mine. After a while she said: "Can you believe it? Yesterday we were thinking about this awful winter coming on. To-day we're on our way home."

"I know. It's marvellous."

But she must have realised that my enthusiasm wasn't a match for hers. "Look here," she exclaimed, "what's on your mind, Jeremy? You've been trying to hide it all morning."

I answered with reluctance. "I've got a queer feeling—that's all. As if—as if something might happen that we don't expect."

"As Spike would say—be your age, kid!" She shook my arm. "What's come over you?"

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"I don't know. But have you noticed how quiet everybody is about the size of Hermanoff's ship and about how many people can go in it? If you say anything they just change the subject."

She became thoughtful. "Yes, perhaps you're right about that. You think Hermanoff's not sure whether

he can take us all or not?"

"Well, there are six of us," I said. "Then Hermanoff and Andrieff. Eight people altogether, and the ship was built to carry only two."

"I see what you're getting at." She was quieter now. "But it may be just your imagination, the whole

idea."

"Maybe it is," I said.

We climbed out of the glen and began to cross a flat stretch of moss which lay like a carpet below the rocky hill. The four in front had been moving at a fast pace, and now we found ourselves a considerable distance behind them. We were carrying quite a load of stuff in our packs, including our spacesuits, and I think Janet was beginning to feel tired. The thin, cold atmosphere may have had something to do with it.

Once or twice during the past hour Madge had looked back, as if to see how we were getting on. Now, after fording a shallow stream, she detached herself from the others and waited for us, dumping her bundle on the ground.

As we waded into the water she called out: "'Ere-'urry up! Wot's keeping you two?"

Janet laughed. "We're not all such high-steppers as you are!"

"'Igh-stepper—me! Cor, my pore old feet are killing me! But you never know when that there mist will come down again."

We scrambled across beside her. I helped to balance the bundle on her shoulder, and we went on, trying to walk as quickly as we could.

Presently I said: "What were they speaking about before you left them?"

Madge looked surprised. "The three scientists, you mean?"

"Yes."

"Don't ask me! 'Zones of resistance', 'escape velocities', 'relative inertia'—things like that." She sniffed. "Might as well 'ave been talking Gaelic as far as I was concerned. Lumme, I'll be glad when we get back to Inverard and I can settle down to a nice big fire in my kitchen."

We reached the foot of the rocky peak and skirted a mass of pink boulders which lay scattered on its northern shoulder. Then suddenly we saw Hermanoff's ship about a mile away, like a strange red fungus sprouting from the hillside.

"It's a baby one, that is!" exclaimed Madge. "But never mind, we'll soon know all about it. I just 'ope old Whiskers will like my cooking!"

On our arrival we were greeted warmly by Spike and Andrieff. We threw off our packs and bundles and sat down with relief to enjoy the meal of sandwiches and coffee they had prepared for us. Afterwards my uncle and Professor Bergman went inside the ship with Hermanoff and his assistant, while Madge and Janet and Spike and I remained below in the cool sunshine.

To pass the time Spike described for us the interior of the foreign ship, which, it appeared, contained a mass of equipment similar to our own. The main difference, he said, was in its size and in the fact that

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one entered the hull almost at ground level and climbed up through a pressure-chamber into the main cabin.

"Like an escape hatch in a submarine?" inquired Tanet.

He nodded. "If anything went wrong topside, the crew could take refuge there."

"It's a good idea."

"Sure. I give old Hermanoff full marks for it."

Nearly half-an-hour had passed before Uncle Lachlan emerged from the ship and came across to where we were sitting. His face was craggier than ever.

"Sorry to have kept you waiting," he said. "Professor Hermanoff and I have been working out the maximum load his ship can carry. Gravity and the light atmosphere will be in our favour, of course; but in spite of this I'm afraid the take-off is going to be rather a problem. However, Professor Hermanoff believes that if he jettisons his heavy instruments and we leave our extra clothing, spacesuits, and rations behind, he can take us all."

"Gee, I'm glad of that!" I couldn't help betraying sudden and intense relief. "I—I thought some of us mightn't be able to go."

He smiled, and Madge put in: "Wot about that nice cooker Mr. Stranahan was describing to us?"

"Sorry. It must be taken out. But the return journey will be over in fifty-four hours, and we can easily exist for that time on a few tins."

"There won't be much room for iridonium," said Spike.

"No. All we've decided to carry is one pebble of iridonium and a single plant of Charity. Now, I

think you'd better dump all this stuff behind the rocks yonder. Hermanoff and Andrieff and Professor Bergman have begun to strip down the instruments, and we'll be ready to leave in about twenty minutes."

Janet clapped her hands and began to open her bulging pack. But I noticed something odd about Uncle Lachlan's expression.

"Just one more thing," he said, quietly. "I should like to be honest with you all. It's my own personal opinion that Hermanoff has been over-optimistic in his calculations."

Spike was startled. "What do you mean, Doctor?"

"Just this. I believe that with eight of us on board the take-off will be—highly dangerous. But the issue is so close that if one of us stayed behind there would be no risk at all."

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TNCLE LACHLAN didn't pursue the subject; but all the time, as we stuffed our superfluous clothing and food underneath a pile of stones, the feeling I had described to Janet returned to me more sharply than before: the feeling that something unexpected was going to happen.

At the beginning—back at Inverard—my uncle and I had been like strangers. Now I knew him better than anybody and was convinced that much more than a simple warning lay behind what he had said. The possibility that Hermanoff's ship, with so many on board, might crash during the take-off was certainly a cause for anxiety; but it didn't worry me as much as this other indefinable fear.

Then Hermanoff came out of the ship, where he had been stripping down the heavy instruments with Andrieff and Professor Bergman.

"The work is done, Dr. McKinnon. We are ready to go."

We gathered round him. None of us now carried anything except Madge, who had put a few tins of meat and a packet of biscuits into a white cloth. Janet and Spike drew closer together, as if attempting to comfort each other.

"This is a great kindness you are doing us," said Uncle Lachlan.

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"Kindness!" Hermanoff shook his head. "It is not really kindness. I could not leave you here to perish in the cold."

Madge touched the sleeve of his black jacket. "You're a real sport, Professor. That's wot I say."

He looked embarrassed. "Time we went inside," he said, trying to sound gruff and formidable. "Our take-off is timed for eleven-forty-seven exactly, and it is now eleven-thirty."

- "Just a minute," said Uncle Lachlan.
- " Yes?"
- "I still hold to my opinion. With eight of us on board the take-off will be—a definite risk. But if one of us stayed—"

Hermanoff spread his hands, palms upward. "My friend, we have been into all this before. The idea of leaving anyone behind is absurd—out of the question."

- " I don't agree."
- "Well, I do, Dr. McKinnon," put in Madge, stoutly. "Who would want to stay be'ind anyway? Surely we can all share a little risk for the sake of the others."
 - "Madge, please understand-"
- "I think she does understand," interrupted Hermanoff. "Miss Smith is a sensible lady. In any case the risk is not so great as you make out. My jets have a great reserve of power."

Amy reply that Uncle Lachlan might have made was cut short by an exclamation from Janet, who had turned to glance back towards the north. We all looked in the same direction; and as we did so I realised that we were leaving Hesikos only just in time. A great billow of mist was welling up over the

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distant mountains, just as it had done three days before. But this time there were solid white fingers on the mountains themselves—white fingers of ice and snow which, even as we watched, stretched slowly down above the plain. The sun, low on the opposite horizon, had taken on a brassy colour, as if a brown veil were being drawn across it.

The mist was moving towards us like a tidal wave. Already we could feel a trace of its icy breath, and it was obvious that in a few hours the northern part of Hesikos would be in the grip of winter. At our feet the small white flowers were folding inwards on themselves, preparing for darkness and sleep. Even the moss was losing its fresh greenness and had taken on a yellow tinge.

"Blimey—it makes me shiver just to see that mist!" exclaimed Madge.

Hermanoff caught my uncle's arm. "Come," he said. "It is necessary to get away before there is any risk of the landing-gear freezing solid to the ground."

We went in through the narrow opening at the base of the pressure-chamber. Hermanoff closed it behind us, and we climbed up the steel ladder into the main cabin. On the touch of a lever the hatch in the floor slid smoothly shut.

The first thing our new friend did was to put the box containing the iridonium and the plant of Charity into a small safe which had been built in the wall of his ship. Then Andrieff, smiling amiably, presented each of us with short lengths of rope. These were in place of safety-belts, and we all began to secure ourselves to the bolt-holes left empty by the removal of the instruments. All of us, that is, except Uncle

Lachlan, who seemed to be revolving some kind of problem in his mind.

"Dr. McKinnon, why do you hesitate?" asked Hermanoff.

Suddenly my uncle smiled, and I was surprised to see some of the cragginess disappear from his tace, leaving it calm and alert. "Might I ask a favour?" he said.

- "Of course."
- "I should like your permission to go down into the pressure-chamber and to remain there during the take-off."
 - "But-but why?"
- "I have a theory that in a pressure-chamber of that kind the black-out effect will be much less noticeable than here."

Hermanoff said: "I do not understand . . ."

- "Perhaps not," returned Uncle Lachlan, firmly. "But I should like to make the experiment."
- "Very well. If you insist. But you will take precautions? You will use the rope?"
 - "Certainly I will take—precautions."

Hermanoff opened the hatch. Uncle Lachlan went towards the ladder and began to climb down into the darkness below. There was a tightness in my chest.

"Don't take any risks," I said, abruptly.

He looked up and smiled. "As few as possible, Jeremy. Some day," he added, still looking in my direction, "some day I think you will understand the value of this experiment."

Then he was gone and the hatch again slid shut.

None of us said anything for a time. Then Madge, tying a final knot in the rope beneath her arm-pits,

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wrinkled her brow and said: "'E looked kind of funny, didn't 'e, Professor 'Ermanoff?"

"Yes. I—I cannot understand this experiment he talks about."

But Professor Bergman seemed undisturbed. "Always Lachlan has ideas of his own. It is better to let him be."

"I suppose you are right." Hermanoff shrugged. "In any case we have now only one minute. You are all prepared?"

We said we were, and I realised that the moment of danger had come. For a time I forgot altogether that Uncle Lachlan had gone below. Andrieff went to the controls, and Hermanoff, consulting his watch, began to count the seconds to himself. A huge questionmark formed in my imagination. What would happen if the load proved too heavy?

Andriess's hairless, yellow face shone in the light of the electric bulbs. One hand rested on a lever, and as Hermanoss called out "Contact!" he pressed down with explosive energy. The whine of the atomic motor soared up to a high-pitched shriek.

"Switch to jets!" shouted Hermanoff.

The lights dimmed. A tremendous roar burst out. The ship swayed and shuddered.

Seconds passed. I knew we hadn't yet risen from the ground, and I watched Hermanoff's face with desperate anxiety. It remained inscrutable.

Louder and louder thundered the jets. Perspiration glistened on Professor Bergman's forehead. Madge put up her hands and covered her eyes.

Then suddenly the ship surged below us. My feet were pressed down savagely against the steel deck. Spike held Janet close to him and shouted: "We're

gaining height! You've done it, Hermanoff!"
The lights blazed, and the whole ship began to turn. The ropes bit into the flesh of my arms. I felt sick and dizzy.

But soon the black blanket came floating down and I felt nothing at all.

THE VOYAGE HOME

A s had happened on our flight from the Earth, I was the last to recover consciousness. By the time I came to, all the others had untied themselves and were moving about the cabin, which had already taken up a horizontal position. Again I had the impression of a curved, unstable floor and the odd sensation of seeing people upside down above my head. Compared with our own ship, however, everything was on a much smaller scale.

It was Janet who brought me round and helped me with the knots on my home-made safety-belt. Then Hermanoff, who had been talking to Andrieff at the controls, came striding diagonally down the floor. His eyes were gay with satisfaction.

- "Ah, Jeremy—you are all right?" he inquired.
- "I'm fine, thanks. Has Uncle Lachlan come in from the pressure-chamber?"
- "Not yet. He will appear presently. I'm sorry our quarters are so cramped. But if you are hungry, ask Miss Smith for a biscuit and a sip of water. I have put her in charge of the provisions."

I told him I wasn't hungry; and Janet said: "You seem to have been pretty accurate in your calculations, Professor Hermanoff. We took off all right."

He nodded. "There was a moment or two of anxiety—and we could not have taken one more

person. But as it turned out the jets did not fail."

"In that case, the landing on Earth ought to be fairly simple?"

"Yes. Quite simple and safe. The denser atmosphere will—"

He broke off as Spike came up behind us. The American looked nervous and ill-at-ease, and when he spoke his voice was unusually quiet. "See here, Professor, I'm worried. Dr. McKinnon hasn't shown up yet."

Hermanoff glanced in the direction of the closed hatch. Finally he said: "Perhaps you should go into the pressure-chamber, Mr. Stranahan, and find out if he is all right. You know how to open the hatch?"

"Yeah. Andrieff showed me."

I put in: "Nothing could go wrong in there, could there?"

"Nothing at all," replied Hermanoff, with a puzzled frown. "At the moment the air-pressure is the same as here."

"Go on, Spike. He may have taken ill," said Janet. The American nodded and went towards the sliding hatch, which now lay vertical at the rear end of the cabin. The rest of us, trying to act casually, moved across to where Madge and Professor Bergman were putting our meagre supplies of food and water into a small refrigerator.

Madge smiled at us. "Seems I'm out of a job on this 'ere trip. Biscuits and cold bully—that's the menu from now on."

"I have been telling dear Madge that we are lucky to have food at all," said Professor Bergman.

"Oh, I'm not complaining," she returned. "But lumme, just think of it! No 'am and eggs, no coffee."

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There was a sound behind us. We turned and saw Spike emerging from the open hatch of the pressure-chamber. His face was white and drawn. As he walked towards us across the steel floor his footsteps echoed in my head like the tolling of a bell at a funeral.

I waited. Everybody waited.

"What's wrong? Oh, Spike—what's wrong?" whispered Janet, as he reached us.

But he didn't answer. He was looking at me.

At last he put his hand on my shoulder. "Jeremy," he said, "your uncle—he's not there."

The ship was as silent as a church, except for the hum of the atomic motor. I felt as if the curved walls of the brightly lit cabin were moving in on me. But at the back of my mind I had been half expecting some such news, and the first severity of the shock soon passed.

- "What do you mean?" I asked, trying to speak steadily.
- "He must have left the ship," replied Spike, "just before we took off."
 - "Was it—was it an accident?"
- "No." His fingers tightened on my shoulder. "I found this note by the lower hatch. It's addressed to you, kid."

I took it, and when I saw the sharp, precise writing tears came to my eyes. I struggled hard not to make a fool of myself.

After a while Madge said quietly: "Woodoes it say, son?"

I shook my head. "I—I can't read it out. You do it, Madge."

"We can all read it," she answered. "'Ere, I'll put it on the table. . . ."

This is what Uncle Lachlan had written: "Dear Jeremy,

I have decided to remain on Hesikos. Without my weight there will be no danger when the ship takes off. I think I can reach our own ship before the mist comes down, and if the batteries last, I may survive the winter. If not, you and the others will carry on my work.

Good-bye, Jeremy. I have never been able to show you much affection. But it has always been there, in my heart, and this may balance the account."

After that there wasn't much to be said. I kept thinking of him all alone on Hesikos, lean and untidy, with the mist coming down and the batteries running low in our ship. In spite of his optimistic words, I felt that he hadn't a chance—that he had known himself he hadn't a chance, better than anybody.

Somehow the time passed. On and on we went, hour after hour through space. There was very little to do. Hermanoff took turns with Professor Bergman at the radar-screens, and Andrieff lived beside his motor. I tried to copy Uncle Lachlan and hide what I was feeling, but it wasn't easy.

On the second day, as the radar began to pick up echoes from the Earth, I was alone at a small table, trying to write in my diary. Professor Bergman came and sat beside me.

"Inknow how you feel, Jeremy. But you have no reason to be sad. Your uncle was a great scientist, and now—what is more important—he has shown that he was a great man."

[&]quot;I always knew he was a great man."

[&]quot;Yes." There was a brightness in his eyes. "Some

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day spaceships will be as common as railway trains. But long after Dr. McKinnon's work as a scientist has been forgotten, his story will still be teld. His influence will remain, to show men the truth. You remember, Jeremy, his faith, when we were building the hip at Inverard. His hope, when our motor was silent on Hesikos. And now, greatest of all, his charity—his love for you and me and all the others. When you think of that, is there any reason to be sad?"

"I'm not really sad," I told him. "I think I understand now what he said—about the value of his experiment."

Madge, Janet, Spike and I had plenty of sleep during the journey. Every four hours, while we were awake, Madge served each of us with a small portion of tinned meat, a biscuit and half a glass of water; and strangely enough we seldom felt either hungry or thirsty.

The voyage was uneventful; and perhaps because my mind was numb and apathetic during the greater part of it I can remember few details. But as the flashing lights on the Earth-beamed radar occurred more and more frequently, I began to feel different. Optimism and hope came back.

Late on the third day I was squatting cross-legged on the floor, trying to put a polish on my shoes with a soiled handkerchief. I noticed Hermanoff and Professor Bergman, in the fore part of the ship, poring over a space-chart and making intricate calculations. They turned suddenly and said something to Spike, who was inspecting a faulty wire in the refrigerator with Madge. He grinned and caught her arm. Leaving the two scientists to resume work, they hurried across in my direction.

- "We're almost 'ome. Old Whiskers 'as just beer telling us."
 - I jumped to my feet. "You mean..."
- "In another fifteen minutes," said Spike, "Hermanoff reckons he'll be turning the ship to make a landing."
 - "At Inverard?"
 - "Yeah."
 - "Think of it, son!" exclaimed Madge. "To-night you'll sleep in a nice comfy bed again, and to-morrow you'll waken up with the smell of 'am frying and the sound of sparrows at your window. Blimey, I 'ope Ferguson 'as got plenty of rations in. After all this 'ere bully and biscuits I could be doing with something nice and 'ot."

Janet had been chatting with Andriess at the switch panel. Now she came across and joined us.

"What are you three gossiping about?" she asked.
Madge smiled. "We're planning a nice 'ot meal,
ducks. Ain't you glad we're nearly 'ome?"

But oddly enough, when Spike explained the position, she didn't show any marked enthusiasm. "I'll be glad to be back," she admitted. "But studying Science at Glasgow University will be a bit stale after all this."

Spike put his arm about her waist and hugged her affectionately. "I reckon they ought to make you a Doctor of Science right away!"

"They won't!" she assured him. "They'll probably fail me in my first exams. However, I'll have a month to settle down at Inverard before the new term."

Madge cleared her throat. "There's just one thing,

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and it's up to young Jeremy 'ere. Wot's going to

'appen at Inverard?"

"I'll keep it going," I said. "And—and perhaps build another ship. . . . But look here," I went on, quickly, "we're talking as if Uncle Lachlan were dead. We can't be sure of that, can we? I mean, perhaps he did get back to our ship in time—and the batteries may last out. There's plenty of food and warm clothing."

I saw pity in their eyes. Spike said: "Don't build up your hopes, kid."

But I wasn't in a mood to accept pity. "I felt quite hopeless at first," I confessed. "But now—well, my uncle wouldn't give in all at once, would he?"

Madge looked at me, thoughtfully. "No, 'e wouldn't," she agreed. "Not Dr. McKinnon."

We had no opportunity of discussing the matter further. A few minutes later Hermanoff called to us that we were about to make a landing and that we ought to secure ourselves. I couldn't help feeling excited as I tied the rope underneath my arms; and I was surprised to notice that while we waited both Janet and Madge spent the time tidying their hair and dabbing powder on their noses.

Spike winked at me. "'There's nothing like a dame'," he grinned, quoting the song.

Then Hermanoff looked up from his watch. "At this moment," he said, "we are entering the atmosphere of the Earth. It is time to release the parachute."

He touched a switch, and almost at once the ship heeled over. We held on grimly as several loose tins rattled across the floor.

"Andrieff—rotatory jets to negative!"
There was a chaotic moment. The centre of gravity

shifted and we were flung violently against our safetyropes. But quite soon, when the main jets came on as air-brakes, the ship steadied. The floor began to press up against us.

Above the increasing roar of the jets Hermanoff called out: "Not long now. Everything is normal."

I watched the altimeter. A thousand feet . . . nine hundred . . . eight hundred . . . seven hundred . . . "Jets off. Andrieff!"

The savage roaring died away until there was scarcely a sound, except for a faint whistle of wind outside.

The altimeter needle moved round the dial. Four hundred . . . three hundred . . . two hundred . . . one hundred . . .

"Hold fast, everyone!"

We waited. Every muscle in my body grew tense.

And suddenly we struck. There was a mussed thud and a harsh, hissing sound from the hydraulic landing-gear. For a moment the ship trembled; then almost at once everything became motionless and silent.

After a few seconds Hermanoff spoke. "My friends," he said, "we are safely home."

THROUGH THE CORRIDORS OF SPACE

We had landed on the moor above Inverard, on the stretch of ground prepared for the return of our own ship. As we opened the lower hatch in the pressure-chamber the sun dazzled our eyes, and somewhere down in the glen we heard a curlew calling.

We came out and stood on the springy heather, unable to speak to one another. Presently, about three hundred yards away, we saw a man coming towards us. I knew at once it was Jock Ferguson, the foreman engineer whom we had left behind, and I ran to meet him.

I was so glad to see another human being that when he shook my hand I found myself swallowing a lump in my throat.

- "Welcome home, lad!" he said, in his warm Scots voice. "We picked you up on the camp radar early this morning. We'd nearly given up hope of ever seeing you again." He glanced behind me, and his expression altered. "But gosh, it's a different ship!" he exclaimed. "That's not our ship at all!"
 - "It belongs to Professor Hermanoff," I said.
 - "Hermanoff! The foreign scientist?"
 - "Yes. The atomic screen on our ship was damaged,

and we hadn't a spare. We thought we'd be stranded on Hesikos. But then Hermanoff came and took us back with him."

"Man, it's incredible!" He scratched his head.
"He was ready to murder you all before you left."

"I know. But he's changed. We've all changed."

He smiled. "Ach, I bet your uncle's just the same old slave-driver! Never mind, I'm glad he's come back."

"He-he hasn't come back."

His thin face seemed to grow thinner. In a quiet voice, he asked: "Is he dead?"

I told him I didn't know. "There were too many of us in Hermanoff's ship, so Uncle Lachlan stayed behind. We didn't realise what had happened until we'd started our journey."

"But maybe, if he's got plenty of food-"

"It's the winter, Jock. Before we left we saw it coming. It's so cold nothing can live."

"I see. I'm sorry, lad."

He didn't say anything more, and we went to join the others.

That was a day to be remembered. The cook had a hot meal ready for us, and it tasted good after more than fifty hours on biscuits and bully. Then we had an invasion of newspaper reporters and cameramen, all wanting to hear our story. Janet and Spike talked to them patiently; but it was Madge, using a broom and some remarkable language, who got rid of them in the end.

After supper we gathered in the study—Hermanoff, Professor Bergman, Spike, Madge and myself. Janet had gone back to the ship to fetch the box containing the iridonium and the Charity. We were all confident

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that the plant would still be alive, as it had been packed carefully in damp moss.

"It is strange to think of it," mused Professor Bergman. "The only concrete evidence of our journey—one fragment of shining metal and a small white flower."

Madge nodded. "Makes you think, don't it!"

"Tomorrow," said Hermanoff, "Professor Bergman and I will try an experiment with the iridonium. Perhaps we shall make a gold ring for Miss Smith and a bracelet for Janet."

"Oh, come off it!" exclaimed Madge, flushing with pleasure. "Fancy me with a ring."

As she spoke Janet appeared at the door. "Sorry I took so long," she said. "Andrieff couldn't find the key of the safe at first. However, he got it in the end. Here's the box."

She came and put it on the table in front of me, for it had been decided that, as Uncle Lachlan's representative, I should be the one to open it. About nine inches long and made of ccdar-wood, it had a simple catch which I pushed sideways. Immediately below the lid was a movable tray filled with moss, and out of this I lifted the plant of Charity.

As I held it on the palm of my hand it looked delicate and fresh. Its long, slender root was arranged in a flat coil; but I knew that this coil, when straightened out, would penetrate for at least six feet into the ground. From its green stem there sprouted a mass of leaves, with the pointed flower, white and lovely, at the top. Its petals were half-closed about each other, like a budding tulip.

We agreed it ought to be planted in the garden that evening; and as Madge had given it its name I sug-

gested that this ought to be her responsibility as well.

She nodded, eagerly. "That's one job I won't grudge doing before bedtime."

After a while I put the flower back among the moss. Then I lifted out the tray, uncovering the compartment underneath. This had been specially lined with lead to house the pebble of iridonium, which, in Professor Bergman's opinion, was slightly radioactive. But now, when we looked inside we saw no pebble.

We stared in surprise, and Madge burst out: "Blimey—it's gone!"

"I cannot believe it!" exclaimed Professor Bergman, peering down. "I put it in the box myself."

Suddenly Janet pointed. "Look—in the corner there—a little pile of dust. . . ."

We leaned closer. The dust was coloured pink, like the fine sand in an egg-timer. It looked dead and lifeless; and in that moment I think we all realised what had happened. During the voyage from Hesikos the shining iridonium had perished.

Presently Professor Bergman sat back with a sigh. "I should have known," he said. "Exposed to air heavier than that of Hesikos iridonium will collapse and crumble. In my preoccupation with its other qualities I overlooked the question of specific gravity."

"You are right, Professor. I also should have known." Hermanoff let a few grains of the dust trickle through his fingers. "Quite useless," he remarked, but without bitterness.

Spike looked incredulous. "Then no matter what happens we can never make gold from iridonium?"

THROUGH THE CORRIDORS OF SPACE

"Not here on Earth," replied Professor Bergman.

"There will be no gold ring for Madge—and no bracelet for Janet."

I was about to say how sorry I was, but Madge forestalled me.

"Cor, lumme—wot do we care!" she remarked, scornfully. She got up and took the tray with the flower. Beckoning to Janet, she said: "Come on, ducks. We'll plant it in the garden now."

That night I couldn't sleep, even though I was pretty tired. I kept thinking about Uncle Lachlan. In imagination I could see him running towards our ship, his tall angular figure bent forward against the wind, and the mist sweeping down like a great wave to cut him off. Had he reached shelter in time? And if he had, were the batteries still working?

I pictured him alone in the ship, with the hatch firmly closed against the white, probing fingers of ice and snow outside. And all at once, about two o'clock in the morning, something occurred to me. What if he had been able to repair the radio transmitter? What if, at this very moment, he was using up the last remnant of power in the batteries in an effort to get in touch with us?

I remembered that in the study downstairs there was a receiving set adjusted to the same wavelength—the set which Jock Ferguson had listened to in vain, ignorant of the fact that our transmitter was damaged. And as I remembered, I felt a strange compulsion to act. It was as if through vast whispering corridors of space Uncle Lachlan was calling me.

At first, relying on logic and common sense, I struggled against this feeling. But it was no use. As the clock in the hall struck the half-hour I climbed out

of bed, hurried downstairs and switched on the radio.

But, of course, there was nothing to hear, except a vague crackling; and though I sat there in my dressing-gown for ages, no other sound came from the receiver. About four o'clock I began to feel the cold, but I stayed on, determined to listen-in until daylight, when light-wave signals from Hesikos would be unlikely to reach the Earth in any case.

I got up and paced backwards and forwards to keep warm. And suddenly—so unexpectedly that I jumped —Janet opened the door.

"Jeremy!" she exclaimed. "I thought I heard someone. What on earth are you doing?"

I sat down in the big armchair, and she came and perched on its comfortable arm. "Something's telling me," I said, "that Uncle Lachlan didn't die."

She touched my shoulder. "I understand how you feel. But as Spike said before, there's no good building up false hopes."

"He may be trying to let us know he's safe," I argued. "Remember the light-wave transmitter in our ship? If he got it working we could pick up its signal on this receiver—especially at night."

"I know. But-"

"That's why I came down. I've got to listen."

She didn't answer at once. On the wall above us the radio hissed and crackled softly, like a small bonfire of dried leaves.

At last she stood up. "Jeremy, you should go back to bed—really you should. I'll be honest with you. I don't think you'll hear a thing."

"Well, I do," I told her, stubbornly. "And I'm going to keep on listening."

THROUGH THE CORRIDORS OF SPACE

- "You're so like your uncle!" She shook her head, smiling a little. "Once get an idea and nothing will move it."
- "It's not that. There's something inside mesomething I can't explain."

She sighed. "All right. I'll sit up with you for a while. Tell you what—I'll make a cup of tea. How's that?"

- "Thanks very much. But I don't want to keep you out of bed."
- "That doesn't matter. I'm not sleepy now." She went towards the door. "You just sit here and listen. I'll be back in a few minutes."

We drank the tea, and afterwards I didn't feel so cold.

The minutes went past, but nothing happened. Janet lay curled up on a chair opposite me, her eyes closed. After five o'clock I dozed off myself.

And then, for no apparent reason, I was wide awake. The radio still crackled softly; but as I listened there came from it another sound—a faint sound like a stutter of Morse.

I leapt to my fect and turned up the volume. "Janet!" I called out. "Janet!"

She opened her eyes. "What is it now?"

"Listen!" I told her.

Again it came, this time louder and more distinct. Her expression changed. "There is something," she whispered.

We waited. And suddenly, with startling clarity, the signal was repeated.

"Did you hear that?" I asked, with desperate urgency.

She looked pale and tired, but her eyes blazed

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with excitement. "Jeremy," she said, "do you know what it spelt out?"

"No. I—I can't read Morse."

She caught my arm. "Jeremy—someone is sending out the letters, A-L-I-V-E . . ."

A FLOWER CALLED CHARITY

PROFESSOR BERGMAN, Hermanoff and Spike were agreed that no one but Uncle Lachlan could have sent the message. It was evident now that he had got back to the ship in time. It was evident, too, that as the transmitter was working, the batteries must still be effective. And as long as the batteries retained power the heaters would protect him.

After breakfast I put the question point-blank to Hermanoff. "Will you go back for him?"

He bowed, unusually formal. "Your uncle's life is at stake. I will return to Hesikos."

I found myself trembling with relief. "You'll take me with you?" I asked.

"No. That I cannot allow. You see, it is only necessary for two of us to go. I will be one, and the other must be an engineer, with knowledge of the atomic motor."

Spike had been listening. Now he grinned at me, wrinkling the corners of his eyes. "I'm going," he said. "It's all arranged."

"When? To-day?"

"To-morrow," returned Hermanoff. "Your men, under Jock Ferguson, will overhaul my ship, starting now and working throughout the night. Mr. Stranahan

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has already devised a system of de-icing for the landing-gear."

"How-how can I thank you?" I stammered.

"Do not try, my son," replied Hermanoss, gently. And Spike said: "I guess it's the least we can do."

Next day, a few minutes before five o'clock in the afternoon, we stood in the garden at Inverard—Janet, Madge, Professor Bergman and I. Andrieff had flown back to his own country that morning.

We watched Hermanoff's ship standing high on the moor, dark against the blue September sky. Suddenly there was a flash of crimson flame beneath it, and the roar from its jets came echoing down the glen. It rose up—slowly at first, then higher and higher—until at last it disappeared in a trail of white vapour.

Madge put her arm in mine. "Five days, young Jeremy. Five days and they'll be back."

"Hermanoss and Spike can do it," said Janet, with conviction. "I know they can."

But I was still troubled and uneasy. "They are risking their lives," I said.

"Just as your uncle risked his life for us," replied Professor Bergman, in his deliberate way. "They are happy to do it."

Madge smiled. "Take it from me, son, nothing will go wrong. See over there, 'ow the little white flower is lifting up its 'ead, as if to say everything's all right."

We went across and stood beside it. Though planted only two days before, it was already flourishing, its petals opening outwards to the sun. In the quiet evening air its perfume was strong and comforting, just as it had been on Hesikos.

Professor Bergman bent down and touched it.

A FLOWER CALLED CHARITY

"By the time your uncle is back, Jeremy, there ought to be new shoots above the ground." He looked up at us, and I noticed a strange expression in his eyes. "Who knows?" he added, quietly. "Perhaps some day it will spread over all the world."

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